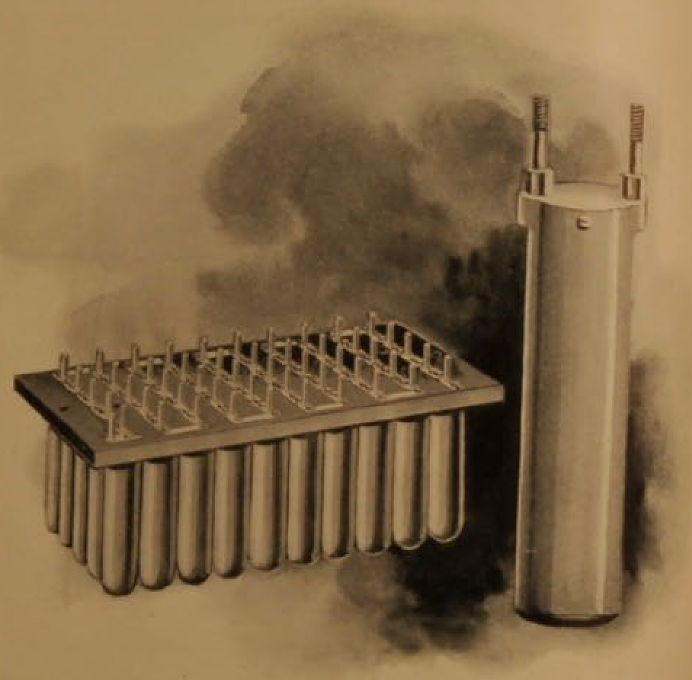
GALVANIC CELL

The illustration shows a Chloride of Silver Interchangeable Dry Cell of the Galvanic form, complete, ready to be attached to the cell-supporting plate. The outside diameter of the cell is ¾ of an inch, and it weighs 1½ ounces.

A nest of fifty cells is also shown securely mounted on a cell-supporting plate, waiting to be slipped into place in a carrying case, and ready for the instant call of the operator. These fifty cells, mounted, weigh less than seven pounds and, when properly encased with whatever extra fixtures may be required, will yet be found easily portable.

New Galvanic Cells are supplied at ninety cents each. When exhausted they can be exchanged for entirely new ones at a charge of thirty cents each. This can be done through any of our dealers or by sending direct to us.

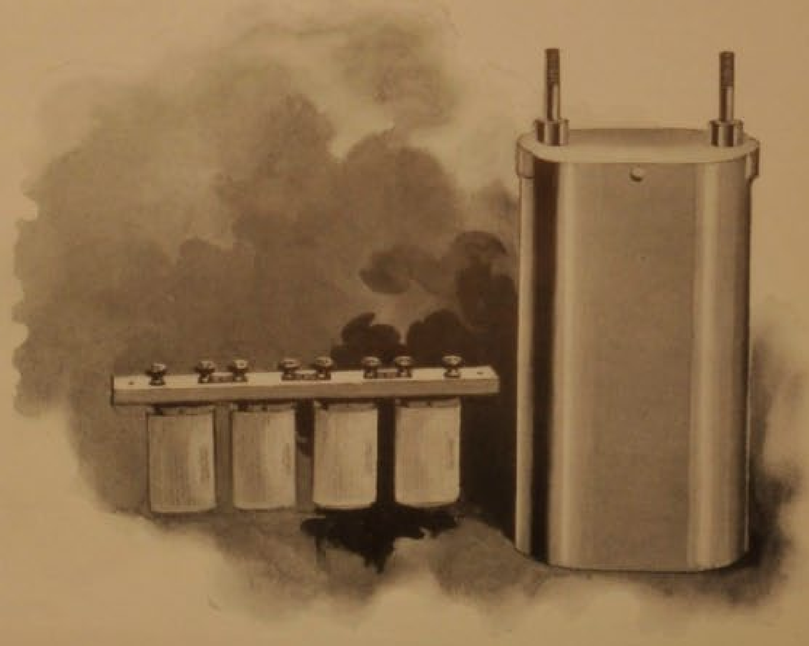


FARADIC CELL CASE

The Faradic Cell Case as shown in the illustration is made up of two cells connected in multiple to increase the current output. Some batteries, such as our Lord Baltimore, require only one cell case to operate them, while others use from two to four according to the windings of the individual coil. In the former the life is about forty hours, and in the others approximately one hundred hours of actual service is given.

The arrangement of two or more cell cases is shown, the cases being connected in series to compound the voltage.

New Faradic Cell Cases cost two dollars each, and when exhausted they can be exchanged through our dealers or direct from us at a charge of seventy-five cents each, so that the average cost of the one cell instrument is two cents per hour; two cells, 1½¢ per hour, and if four cell cases be in constant use the cost is only three cents per hour.



It will be rarely found necessary to employ more than two cell cases, and the average cost may be set down at ¾¢ per hour for each cell case in service.

WILLMS CURRENT CONTROLLER

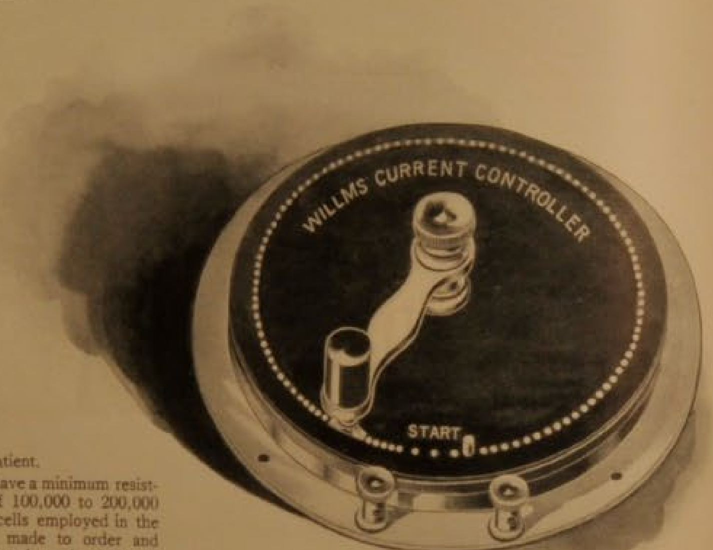
Prior to the invention of our controller, many devices had been tried for varying the strength of current; all of these from a variety of causes failed to fully meet the situation. Their most objectionable feature lay in the use of water in some form or other as a resistance.

The WILLMS CURRENT CONTROLLER revolutionized this field. It sprang into immediate favor with the profession, because IT IS DRY. The resistance body consists of a graphite coat over a network of fine wires, the latter are led to individual pins around the outer edge of a plate of hard rubber to the face of the controller. Over these pins, which are flush with the plate, glides the shoe of the controller lever in a complete periphery.

At the start the resistance offered is the largest, so that the current passing is scarcely perceptible and can be detected only by the meter or on sensitive portions of the body. Then as the shoe passes smoothly along over the contact pins, the resistance can be gradually lessened and the current grows correspondingly stronger until at the end of the circle, no resistance being used, the full battery strength is delivered.

The range of control is so wide and the increase so gradual that the required current is administered without fear of the slightest shock to the most sensitive patient.

A distinctive feature of the Willms Current Controller is that the resistance body is beneath the plate, and the controlling device moves over the contact points on the surface. In all other similar rheostats the controller shoe passes immediately over the graphite, gradually destroying it, rendering the instrument imperfect and causing disagreeable shock to the patient.



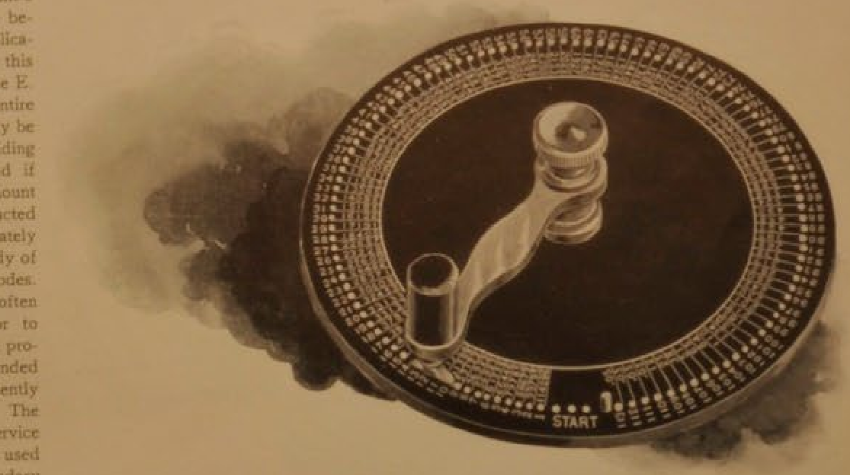
The controllers intended for galvanic work have a minimum resistance of one ohm and a maximum resistance of 100,000 to 200,000 ohms or more, depending on the number of cells employed in the battery. Controllers of higher resistance are made to order and require about one week to complete. When used on the 110 volt electric light circuit an 8 c. p. lamp should be placed in series.

Code	Size	Weight	Style	Price
Canary	6¾x2½ ins.	1¾ lbs.	Galvanic	$10.00
Cancel	4⅝x2½ "	1 "	Faradic, large	7.50
Candid	2⅞x2¼ "	¾ "	Faradic, small	5.00

CALIBRATED WILLMS CURRENT CONTROLLER

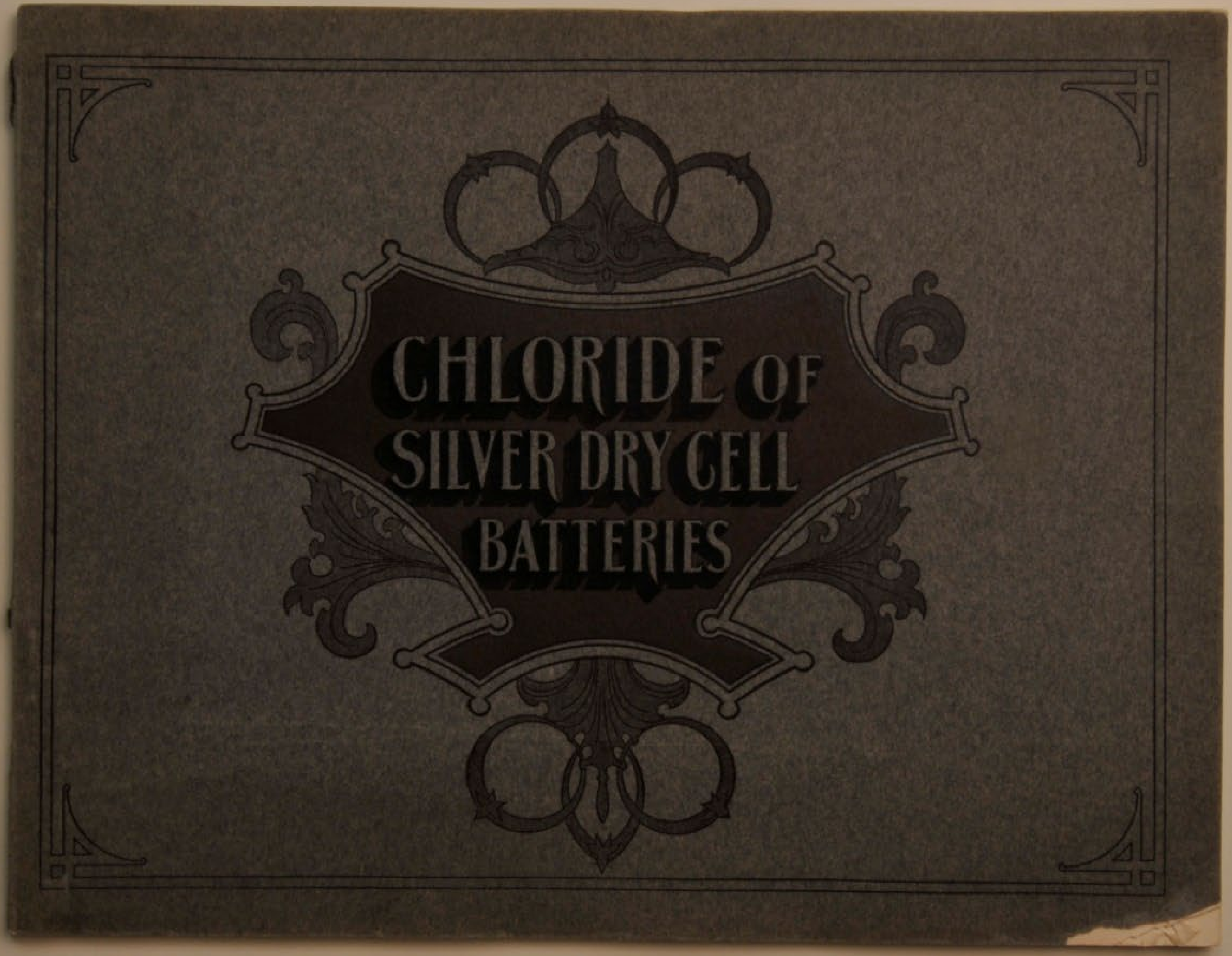
This instrument is the Willms Current Controller calibrated, with the scale of resistance, which is furnished in ohms, marked at each contact of the radial arm in its path around the periphery.

This improvement greatly enlarges the usefulness and increases the satisfaction in using the rheostat, especially in the patient's circuit of the constant or galvanic current; for, aside from the service it renders as formerly, it can now be utilized for determining the resistance of that part of the patient's body which completes the circuit between the electrodes. In any application of the constant current where this graduated rheostat is in use, if the E. M. F. and current are known, the entire resistance in the circuit can readily be obtained from Ohm's law by dividing the E. M. F. by the current, and if from this entire resistance the amount furnished by the rheostat is subtracted the remainder will give, approximately at least, the resistance of the body of the patient between the electrodes. This is a quantity which it is often quite desirable for the operator to know. He can then determine the proportion of energy that is expended upon the tissues treated independently from the entire amount consumed. The graduation is also of much service when the rheostat so graduated is used in the patient's circuit of a secondary induction coil or faradic battery.



Code	Size	Weight	Price
Canoe	6¼x2½ ins.	1½ lbs.	$20.00

The Calibrated Controller can be supplied with all our Constant Current and Combined batteries at an extra cost of $10.00.



CHLORIDE OF SILVER DRY CELL BATTERIES

Chloride of Silver Dry Cell Battery Company, Baltimore

Chloride of Silver Dry Cell Batteries

ELECTRODES AND ACCESSORIES

General Catalogue

The Chloride of Silver Dry Cell Battery Company
BALTIMORE, MARYLAND, U. S. A.

c1921

Forevvord

IN this era of progress and enlightenment, the man whose mere name is a synonym for success—be he lawyer, preacher, doctor, or man of business—is invariably he who keeps in close touch with the most advanced ideas and methods known to his particular calling. The day of mediocrity and makeshift has gone forever. Men who stand in the front rank demand and insist upon having not a good article merely, but the BEST. Experience has taught them that anything less is always a costly experiment.

It is our purpose to call the attention of the medical profession to the extraordinary progress which has been made of recent years in the manufacture of Electro-Medical Apparatus. A good medical battery is as essential to the needs of modern therapy as is the antiseptic or the hypodermic. In short, it is absolutely indispensable.

In the selection of such a battery, the vital question is briefly this: which are the most desirable and essential features, and what objectionable points should we seek to avoid? Other advantages being equal, it stands to reason that a neat, light, compact instrument, capable of being carried from place to place without inconvenience, and free from offensive gases, the elements of which cannot spill and ruin the clothing, would instantly recommend itself to the careful and discriminating physician.

The **CHLORIDE OF SILVER DRY CELL BATTERIES**, as manufactured by us, fulfill these requirements to the letter, and many more.

The current flow is absolutely even and uniform, eliminating all possibility of disagreeable shocks. The cells maintain their uniformity from beginning to end, so that during the last five minutes of working life, each cell yields quite as good results as it did during the first five. In addition, they are absolutely and entirely free from waste when not in use. A **CHLORIDE OF SILVER DRY CELL BATTERY** may be laid aside and unused for years, and when taken from the shelf again will be found ready for immediate use.

The **CHLORIDE OF SILVER DRY CELL BATTERY** is today, as it has been for many years past, the recognized standard of the medical profession. In its present improved and simplified form it has reached a state of perfection which leaves but scant room for further development.

The products of our factory are so universally well and favorably known to the medical fraternity that it is, perhaps, superfluous to dwell at length on their inestimable advantages or to make claims for their merit. **CHLORIDE OF SILVER DRY CELL BATTERIES and ACCESSORIES** are the only electro-medical apparatus that have been found wholly adequate to the complex needs of the medical profession, and wherever you find a user of our instruments invariably you find a satisfied customer as well. The fact that more than *two hundred thousand* of our instruments are seeing daily service in every quarter of the civilized world is the best evidence and the most flattering testimonial we could seek. It indisputably proves that **CHLORIDE OF SILVER DRY CELL BATTERIES** have successfully met the most exacting demands of the profession.

It is the purpose of this catalogue to convey to the mind of the intelligent reader as clearly as the scope of such a work will allow, the superior advantages of **CHLORIDE OF SILVER DRY CELL BATTERIES** for electro-therapeutic uses. The apparatus and accessories described and illustrated within these pages cannot fail to come up to the most sanguine expectations. They are the result of many years of unremitting labor and untiring devotion to purpose, lack of discouragement through occasional failures, and the absence of undue exultation over repeated successes.

Chlor

Patents Granted this Company in the United States of America

May 7, 1889 May 14, 1899 June 11, 1889 July 30, 1889
Nov. 5, 1889 Nov. 5, 1889 Feb. 18, 1890 Sept. 30, 1890
April 21, 1891 Jan. 19, 1892 May 24, 1892 May 24, 1892
July 26, 1892 Dec. 20, 1892 June 18, 1895 Feb. 18, 1896
Feb. 18, 1896 Feb. 18, 1896 Jan. 10, 1899 Feb. 21, 1899
June 27, 1899 July 2, 1901

Patents Granted this Company in Great Britain

June 18, 1895 July 20, 1895 Jan. 17, 1896 Feb. 9, 1899 Mch. 27, 1899
June 2, 1899 Sept. 15, 1900

Other Patents Pending

MUNDER-THOMSEN PRESS

Unique and Distinctive Features

COMPACTNESS AND PORTABILITY

The small size of the cells makes it possible in a very compact space to obtain a current sufficient for any galvanic or faradic treatment. Our galvanic cell is ¾ of an inch in diameter, weighing just 1½ ounces, and a nest of fifty, generating approximately fifty volts, occupies so small a space and weighs so little that even our largest batteries are readily portable. Sizes and weights of our various batteries are given on the pages illustrating them.

CONVENIENCE AND READINESS OF ACTION

Each battery leaves our factory ready for immediate use. There is no loss of time as with other cells, especially of the wet form, to prepare for the production of current. It is not necessary to see that difficult and perplexing battery solution formulae are carefully followed, most of which require the exercise of the utmost patience and dexterity on the part of the operator. Nor is it essential to see that all connections are properly made. When a **CHLORIDE OF SILVER DRY CELL BATTERY** reaches you *it is ready for immediate* service. Open the case, attach the conducting cords to the binding posts, throw the switches into their proper places according to the kind of current desired, and apply.

CONSTANCY AND UNIFORMITY

THE CHLORIDE OF SILVER DRY CELL as made only by this Company is for all practical purposes a Standard. It differs from all other cells, wet or dry, in that there is absolutely no chemical action when not in use. Polarization—so common with other cells—and which makes them unpopular for medical work, is altogether eliminated in **CHLORIDE OF SILVER CELLS**. As a direct result the current is constant and the life of the cell is measured only by the actual demand made upon it. No other battery cell can substantiate such a claim.

CLEANLINESS

The cells contain no liquids or acids, the accidental overturning of which often creates confusion and havoc and the consequent frequent ruination of clothing, with the invariable loss of temper incident to such an operation. Our cells are hermetically sealed and perfectly dry. Should the battery be upset, carried upside down or in any other position, no leakage is possible. It follows then that our batteries are cleanly at all times.

ECONOMY

Economy of maintenance is a subject which will especially interest. Each new galvanic cell in our instruments costs ninety cents. When you have had the benefit of every bit of electro-motive force it contains, return it to us and get a new one at a cost of thirty cents. An average size battery, for example one of our fifty cells, will thus cost fifteen dollars for a working life of from two hundred to seven hundred hours of actual service, depending entirely on the character of work to which it is subjected. Bear in mind that the *life of any electrical battery is dependent on the resistance placed in the circuit.* If the entire human body be interposed, measuring anywhere from three to seven thousand ohms resistance, the cells will readily give seven hundred hours of actual working life, and *as this resistance is decreased, so correspondingly is the life of the battery, no matter how many cells it contains.*

With faradic batteries, the life is dependent on the resistance of the coils, and in those of our manufacture especial care is taken in the windings to insure at one and the same time efficiency in the coil and long life to the cells. Thus a faradic cell case, which costs two dollars, when exhausted can be returned to us and an entirely new one will be given in exchange at a charge of seventy-five cents.

In our four-cell-case instruments the life of the cells is about one hundred hours at a cost of three dollars; or, if all four are used at the same time, the cost is but three cents per hour. However, ordinary applications of the faradic current require the use of only two cell cases at a time, and in such instances the average cost is merely one and a half cents per hour.

EASE OF RENEWAL

ALL CHLORIDE OF SILVER DRY CELLS are strictly interchangeable. By a very simple and unique construction of the plate which holds the cells, any one of them may be detached, a new one inserted in its place and the proper connection secured without special skill on the part of the operator.

DESIGN

The **CHLORIDE OF SILVER DRY CELL BATTERIES** possess refinement of detail and construction that has thus far won for them a field to themselves. Their design is as positive and unique as the effect produced. Each individual part is carefully studied; first, its mission, then its mechanical design and construction, and lastly its finish. The secret of the success of our instruments lies in the great care and precision observed to bring all of their many parts and features into harmonious relation, presenting an imposing and pleasing appearance, without detracting in the slightest from their efficiency. Therefore, not alone can it be regarded from the standpoint of its personal composition as a perfected, well rounded, thoroughly adjusted apparatus, but in its minutest details it may be scrutinously examined, with the assurance of superior construction in every part.

MATERIALS

The best batteries can be manufactured only by the employment of superior materials. Realizing this, all materials we use are ordered to exact specifications as to physical quality and neatness of finish, regardless of cost; we must have none but the best. The greater expense incident to such construction is justified by the advantage that it enables us to offer not only a handsomer apparatus, perfect in design and finish, but we have the additional assurance that the effect desired will positively be forthcoming with the movement of each switch.

FINISH

"Chloride of Silver finish" is a common remark among the dealers, and it is a criticism of which we are justly proud. It at once distinctively stamps our product and places it in a class by itself. Our wood, whether of mahogany or of oak, is all critically selected stock; its care and manipulation is always under the supervision of one of the most experienced cabinet makers, whose instructions are to get only the best the market affords. As a result our cases are rich, beautiful and dainty, completely and modestly artistic in every line.

Probably nothing so brightens and embellishes our various batteries and appliances as much as the polishing and nickel-plating. The principal requisites for insuring a beautiful and attractive appearance are accomplished in these departments, and to bring about the best result requires most careful and patient labor. The process of nickel-plating used in our establishment is distinctly our own, and its superiority is manifested when, after the lapse of years, an instrument is returned to us for inspection and repairs, we find that the coating of nickel is untarnished, retaining its original finish and mirror-like lustre.

DURABILITY

Using only the highest grade of materials and employing the most skilled labor in the production of our apparatus, all parts of which are made in the most substantial manner, it stands to reason that our batteries are as durable as it is possible to make them.

Our cells have longer assured life than any others, because there is in them no local action, and they exhaust only as demand is made upon them. They can be renewed again and again at small cost, so that there is no limit to the time our batteries will last. Some of the first cases put on the market by this Company, seventeen years ago, are still in splendid working condition.

TEST AND GUARANTEE

The machine rooms of our factory are equipped with apparatus of standard make only and of the most modern types. In this department is made every piece that enters into the construction of our batteries and appliances. With perfect system each separate part is examined, compared with a standard by skilled hands, and should there be the slighest question as to its performing the work intended, it is cast aside as imperfect.

The same care is observed with our cells. When these are sealed they are placed in suitable trays and stored in our vaults for a considerable period of time. If after this they show no defect they are sent on their journey with the positive knowledge that they will perform their work well. Each meter is adjusted to perfect accuracy with standard instruments; the rheostats, controllers, rheotomes and current reversers pass under the eyes and through the hands of men familiar with their workings and purposes.

During the process of construction the different parts may be far apart, passing through various hands, yet they finally meet in the assembling and test rooms, to assume their distinct functions in the completed apparatus.

Then again, each instrument undergoes a further test. Each cell is tried, every wire is carefully traced in its proper course, all connections must be absolute, every switch must instantly respond to its purpose. The finished battery is now passed to an expert for further examination and adjustment, who in turn delivers it to a second expert to receive final approval and the guarantee certificate that goes with each apparatus of our manufacture.

After such precision and care it is almost impossible for an instrument to leave our factory in any but perfect condition, and we assert with pride that a complaint rarely reaches us.

GUARANTEE

All our instruments are guaranteed to be practically perfect in mechanical and electrical detail, and must perform the work for which they are intended. Any trouble that can be traced to defect in manufacture will be made good by us free of charge.

Our patrons are entitled to perfect apparatus, and it is our desire that none should be retained not up to the claims we make for them.

EXCHANGES

The vast improvements which have been incorporated into our batteries during the past few years will be especially recognized and appreciated by all who have been our patrons for a long period. To enable those who are now in possession of some one of the older patterns manufactured by us to supply their places with more modern and thoroughly advanced apparatus, representing the maturest judgment and experience of the age, we have inaugurated a liberal system of exchanges, whereby with certain limitations all old style or obsolete batteries are taken in part payment for new ones at a most generous allowance. A galvanic battery must be exchanged for a galvanic or a combined of equal or greater size; a faradic must be exchanged for a galvanic, faradic or combined apparatus, but the new selection must be equal in value to or of greater value than the original cost of the battery so exchanged.

We are assiduously endeavoring to retire from the market every one of the earlier models of Chloride of Silver Batteries. Although the system is quite new with us, the ingenuous manner in which we have handled these exchanges has already retired upwards of seven thousand such instruments, the great bulk of which has seen ten years or more of faithful service; the best evidence of which is the re-investment of the original purchasers in some one of the various new types, and the reluctance expressed by many at parting with an old and never failing friend, even though a more efficient and convenient one was to take its place.

To those who are in possession of any one of these older models, our earnest advice is to communicate with us upon the subject, stating exactly what you have—with serial number of case, if possible—and what you wish in exchange; or, better still, forward the old apparatus to us for examination. We will then take the matter up promptly and arrange with you for an exchange.

TERMS AND ADVICE TO PATRONS

Our various products are generally supplied by dealers in Surgical Instruments, Drug and Electrical Supply Houses throughout the world. However, should you fail to obtain them from your dealer, order direct from us, giving the name and address of the house to whom you applied.

Our goods are sold under contract with the trade, forbidding any other than the catalogue price. Do not mutilate this book; use the catalogue numbers when ordering by mail and code words by telegraph.

When cash accompanies the order, carrying charges will be paid to destination in United States of America and Canada. When goods are ordered to be forwarded C. O. D. the order must include a remittance sufficient to cover transportation charges both ways.

Every battery and each electrical appliance is carefully tested before shipment. Great care is exercised in packing goods properly and in obtaining from carriers receipts for delivery to them in good condition. We assume no responsibility for loss or damage of any kind after goods have been delivered to transportation company.

When forwarding a battery or cells to us for renewal or repairs, be sure to have same packed carefully and *not simply wrapped in paper*. Put your *name and address on the package*, which should be prepaid. Give us definite instructions, and your requirements will be promptly supplied.

Remittances should be made by Post Office Money Order, Express Money Order, New York Draft, United States Postage Stamps or Cash by Registered Letter.

THE CHLORIDE OF SILVER DRY CELL

CHLORIDE OF SILVER was first suggested as a depolarizing agent by Marié Davy in 1860. The investigations of Warren de la Rue first brought into prominence its almost perfect constancy in electro-motive force; for, even with his crude cell, he was able to plainly demonstrate its adaptability for standard elements.

Seemingly unsurmountable difficulties in manipulating the chemical so that it might be easily handled, and in procuring the proper electrolyte to excite its full yield of current without destroying it by chemical or local action, caused the element to remain in obscurity for years. John A. Barrett labored long to overcome these difficulties, and he was later materially assisted by Chas. Willms and other members of our Company's laboratories.

Each obstacle was carefully studied. Chloride of Silver in fine powdery form was employed by De la Rue in his experiments, and the resultant waste negatived his efforts. Casting the fused chemical in various ways checked the waste but met with only partial success until casting in suitable moulds on a silver wire was tried. Later it was shown that by wrapping the element with fine silver wire, its conductibility was still further improved.

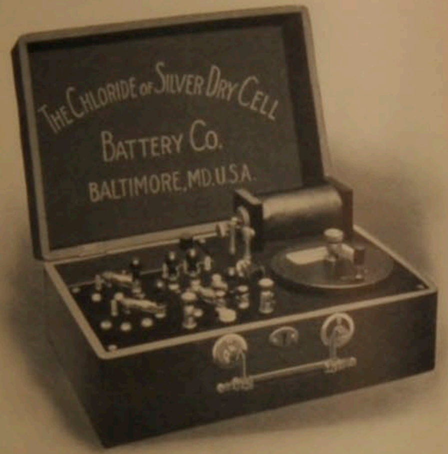
To discover an exciting paste, or electrolyte, which would absolutely defy all local action proved by far the greatest problem to be solved. Our experts, encouraged by previous successes, went at the task with renewed determination, and, though it required years of experiment with all of the resources at the command of science, enthusiasm and skill prevailed; they found the elusive substance.

But one other thing remained—to hermetically seal the elements and electrolyte in the shell, so that there would be no oozing nor leakage of any kind. This proved a much greater difficulty than was anticipated; yet it, too, finally yielded to the efforts of our laboratory force.

One who has never attemped to wrest from nature her profoundest secrets can form no conception of the infinite joy which is the ultimate reward of those whose lives are devoted to the practical working out of a theory for the benefit of their fellow men, when success crowns their efforts. Many severe obstacles encountered and overcome have only made us more and still more proud of our achievement, for we have succeeded in hermetically encasing an electro-motive force of perfect constancy with a permanent excitant, fixed in its chemistry; in a few words,

A PERFECT CELL

"SATCHEL" FARADIC BATTERY No. 4



Many physicians whose practice calls them from the office to the bedside of their patients, have frequently importuned us for an instrument of the satchel pattern.

In the new No. 4 we have produced a model that we confidently know will please the profession, not only in the arrangement and detail of the electrical working, but more especially of the carrying case.

The equipment in this battery is identical with our No. 9, except that the coil, which is beautifully finished, is in sight mounted on the top plate.

The controller is of the larger size, affording an excellent control, from the mildest current to the strongest, with gradual and minute increase.

The battery case is of mahogany, highly polished, and in it will be found one pair each of silk covered conducting cords and best quality sponge electrodes, one ebonized plain handle, one ebonized interrupting handle.

Code	Compactness	Portability	Price
Eagle	11¾x8x5⅛	7¾ lbs.	$25.00
New Faradic Cell Cases in exchange for exhausted, per set of four			3.00
By mail, extra, per set			.25

FARADIC BATTERY No. 8

In this battery we have attained the highest possible state of perfection, responding to any demand made upon the faradic current. Every device that has been proven successful in faradization is embodied and all in compact and portable form.

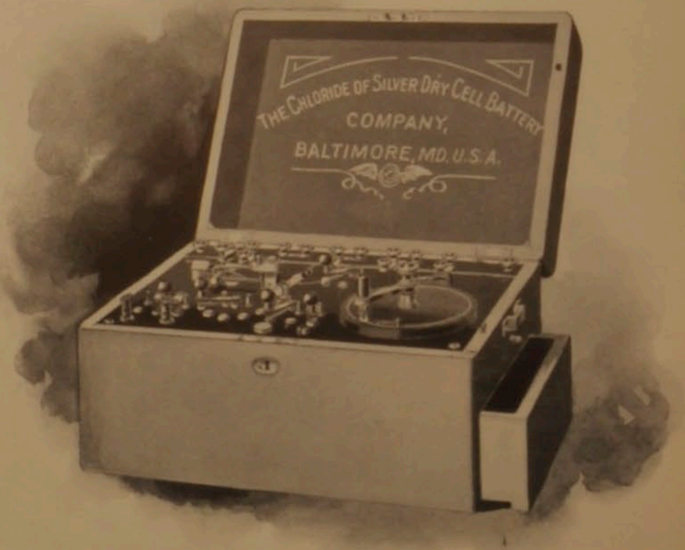
Four Chloride of Silver Cell Cases supply the current, which can be switched in from either two, three or four cells. The Willms Current Controller—medium size—enables the operator to apply the current with minute increase, gradually and smoothly.

The coil is the best that thought and experience can produce, embracing a primary and four secondaries which through the medium of switches can be used either singly or in combination, thus placing nine separate currents at command. The last secondary of No. 36 wire is wound for extra high tension, and is fully 5000 ft. long. With the current from this an eight inch Geissler Tube can be brilliantly illuminated.

In addition to the rapid interrupter that is essential with all faradic batteries, the No. 8 is fitted with a Slow Interrupter of the most approved pattern; this attachment permits the interruption of the current automatically, and can be set to any desired number of interruptions per minute.

The usual Current Reverser and Contact Breaker are placed in the circuit.

The case is of piano-finish mahogany, and in the drawer will be found one pair each of silk covered conducting cords, best quality sponge electrodes, one ebonized plain handle, one ebonized interrupting handle.



ONE HUNDRED HOURS OF
ACTUAL SERVICE $3.00

Code	Compactness	Portability	Price
Eddy	13⅛x9¼x7¼	14 lbs.	$35.00
New Faradic Cell Cases in exchange for exhausted, per set of four			3.00
By mail, extra, per set,			.25

MILAMMETER

To attain assured results, the operator will find the use of a Milammeter almost imperative. Its purpose is to measure the current accurately, so that administration therapeutically may be made in proper and exact doses.

The desirable features to be embodied in a perfect meter are:—

It should be accurate.
Free from changes due to time and surroundings.
Friction of parts must be entirely overcome and avoided.
The free parts must be secured against accidental displacement.
Should be readable from either a standing or sitting position.
Should have a wide range of measurement.
Should be direct-reading without reference to tables or calculation.

All these points are fully met in the construction of our meter as illustrated; besides which, we call attention to the swing of the needle as being nearer "dead-beat" than in any other of the cheaper types of meters, a most desirable feature. Our adjustment for keeping the indicator at zero is accurate and simple; a thumb screw in the back of the case is turned slightly in either direction and the needle responds instantly.

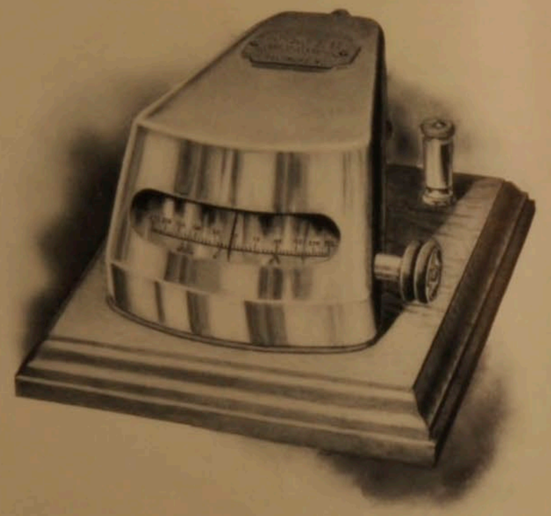
Two scales are provided, the lower scale reading in ½ mil-amperes from 0 to 25, while the upper scale is in subdivisions of 5 mil-amperes from 0 to 250 mil-amperes.

By turning the large milled-head thumb nut on the right, either reading can be quickly secured.

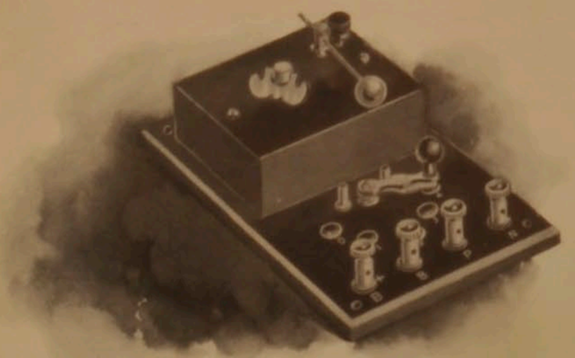
We now make these meters in two styles, to be used either in horizontal or vertical positions, and when ordering care should be taken to specify which type is desired.

The extremely low price of these meters renders it practicable for the operator to employ a measuring instrument in his work. Cheapness, however, is not our first aim, and we challenge the world to surpass our meter in point of quality.

The instrument is encased in a non-magnetic, dust-proof, highly polished, nickel-plated, seamless metal case, and is mounted on a superbly finished mahogany base.



Code	Compactness	Portability	Style	Price
Caper	6x6x3¼	1¾ lbs.	Horizontal	$20.00
Capite	6x6x3¼	1¾ "	Vertical	20.00



ELECTRO-MAGNET

Another instrument, almost indispensable to the outfit of the surgeon, oculist or physician, is the Electro-Magnet.

When small particles of iron or steel lodge in the eye, their removal is difficult and painful with ordinary instruments, but with the assistance of the Electro-Magnet the offending particle is easily and quickly removed and without pain.

The distinct advantage of the little outfit here shown is its portability. As illustrated it is complete with cells, and can be carried in the pocket or shoved into the satchel, ever ready for immediate use. Its lifting capacity is 1000 grains, which is sufficient for all cases.

The Magnet is encased in a hard rubber shell, the cells are in a mahogany case, and the whole is in a neatly covered box for carrying.

It can be operated as well with ordinary cells, and when so ordered the Magnet with two stylets is furnished in a small case.

Code	Size	Weight	Price
With Chloride of Silver Cells.			
Candle	6¼x3½x2¼	1⅝ lbs.	$10.00
Without Cells.			
Cannon	6¼x1⅞x1⅛	½ lb.	4.50

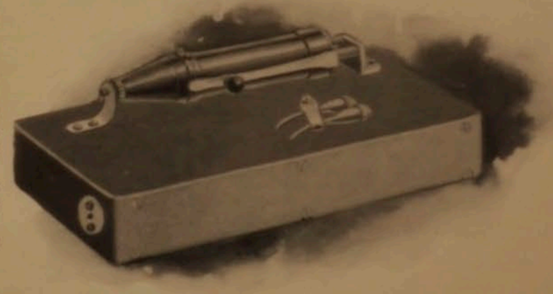
AUTOMATIC RHEOTOME

One of the most valuable adjuncts to the electric battery—Galvanic or Faradic—is the Automatic Rheotome, and its introduction has greatly enlarged the utility of the currents, because of the great range of current interruptions it affords.

All faradic batteries are provided with the ordinary vibrator rheotome—or buzzer, as it is commonly called—the intensity of which is increased or diminished by change of coils or by battery strength; but the Automatic Rheotome interrupts the current any number of times per minute with precision and regularity according to the desire of the operator. In treating paralysis and muscular troubles and in diagnosis such varied interruptions are highly important.

Our Rheotome can be set to interrupt the current from six times to nine hundred times per minute, affording sufficient variation for all treatments.

It is encased in highly polished hard rubber and mounted on a base of similar material.



Code	Size	Weight	Style	Price
Canopy	7x4½x2½	1¼ lbs.	Mounted	$10.00

GALVANIC BATTERY No. 3

The battery here illustrated is in all respects identical with the No. 1, though fewer cells are used, and it has no Current Reverser. It is intended for use in the treatment of cases requiring a small amount of current, and is sufficient for work about the head, treatment of urethral stricture, and especially for the removal of superfluous hair, warts, moles and other small growths.

With it are included a pair of silk cords, a pair of sponges and a nut wrench.

REMOVAL OF SUPERFLUOUS HAIR.

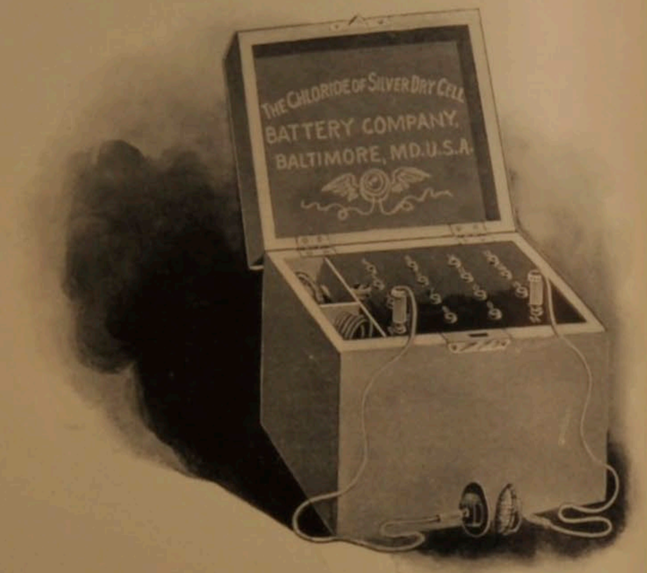
A good needle with a long sharp point is made fast in the needle holder and connected by a conducting cord to the negative pole of the battery; a well moistened sponge similarly connected to the positive pole is grasped in the patient's hand. A surer and better contact is obtained if the wrist electrode, our No. 32, is used.

Carefully introduce the needle into the follicle along the side of the hair, then close the circuit from ten to thirty seconds. As soon as a slight frothing is produced, or a circle appears around the mouth of the follicle, the circuit should be broken and the needle withdrawn. If the hair does not leave the follicle with the gentlest traction, reintroduce the needle one or more times until the desired effect is produced. A good magnifying lens, such as our No. 89, is of the greatest assistance.

Outfits for Removal of Superfluous Hair.

6 cell No. 3 with No. 78 or No. 124 or No. 125 Needle Holder, six steel neeles, one platinum needle and self-holding lens, No. 89	$12.00
12 cell No. 3 with same accessories	17.00
16 cell No. 3 " " "	22.00

If Chisolm Needle Holder No. 71 is preferred, it will be supplied at an extra charge of $2.00.



Code	Size	Compactness	Portability	Price
Cameo	6 cell	4½x4½x5½	2¼ lbs.	$10.00
Camis	12 "	5½x5½x5½	3½ "	15.00
Camp	16 "	6⅜x5½x5½	4 "	20.00
New Galvanic Cells in exchange for exhausted, each				.30

GALVANIC BATTERY No. 1

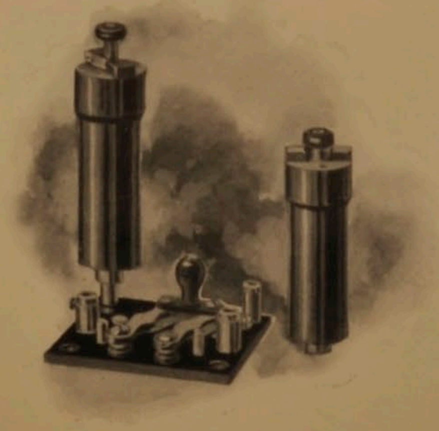
This battery, the simplest of all the galvanics, consists of a number of Chloride of Silver Cells arranged in series, attached to a cell-supporting plate. Each cell is plainly numbered on the top plate, so that any desired number or any series of cells may be selected. It is equipped with:—

A CURRENT REVERSER — Frequently called POLE - CHANGER or POLARITY CHANGER. It is absolutely essential with the battery, for with its aid by simply shifting the switch from side to side, the polarity is instantly changed without removing the electrodes from the patient.

WATER RHEOSTAT — This device is a substantial hard rubber bottle with a removable screw cap to permit of easy filling. In practice, the piston is pressed down to gradually increase the current strength.

ELECTRODE COMPARTMENT — Intended for the various electrodes. In it are included a pair of selected silk-covered conducting cords, a pair of the best sponges, an ebonized plain handle, an interrupting handle, a nut wrench, a screw driver and a pair of testing plugs.

CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.



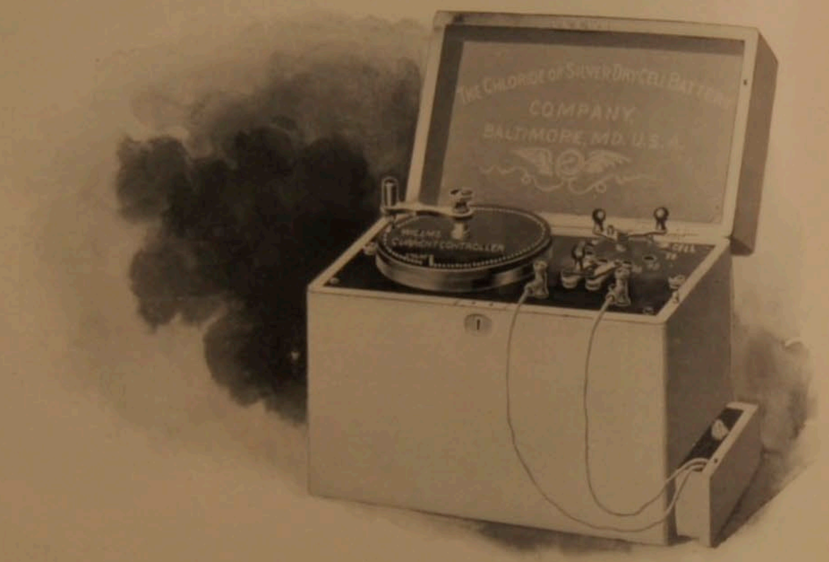
Code	Size	Compactness	Portability	Price
Cake	24 cell	10⅛x5¼x7½	8 lbs.	$27.00
Calk	32 "	10⅛x5¼x7½	8¾ "	35.00
Call	50 "	11⅛x6⅛x7½	10¼ "	50.00
Caller	60 "	13 x6⅛x7½	14 "	60.00
Calm	84 "	13⅞x9 x7½	18¼ "	82.00
Calmy	100 "	13⅞x9 x7½	20 "	95.00
Cadet—New Galvanic Cells, each				.90
New Galvanic Cells in exchange for exhausted, each				.30

GALVANIC BATTERY No. 10

In this battery the cells are hidden from view beneath the hard rubber top plate, and arranged in series of five each in the 25 cell, of seven each in the 35 cell and of ten each in the 50 cell outfits. Each group of cells is connected to the cell-selecting switch on the top plate, by means of which any one group of cells or all of them may be placed in the circuit.

A CURRENT REVERSING SWITCH is provided for changing the polarity. The chief feature of this battery is the WILLMS CURRENT CONTROLLER, a full description of which is given elsewhere on page 12. The great advantages of such a controller are universally admitted, for with its aid a mild current may be applied to the most delicate and sensitive portions of the human body which otherwise would not be amenable to electric treatment.

The case is of beautiful mahogany, and in the drawer will be found a pair each of silk conducting cords, sponges, one each ebonized wood plain and interrupting handles, a nut wrench, a screw driver and a pair of testing plugs.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY
BALTIMORE, MD. U.S.A.
WILLMS CURRENT CONTROLLER

Code	Size	Compactness	Portability	Price
Carat	25 cell	12x7¼x11	13½ lbs.	$43.00
Cargo	35 "	12x7¼x11	14½ "	52.00
Carle	50 "	12x7¼x11	16 "	65.00
Cadet—New Galvanic Cells, each				.90
New Galvanic Cells in exchange for exhausted, each				.30

GALVANIC BATTERY No. 11

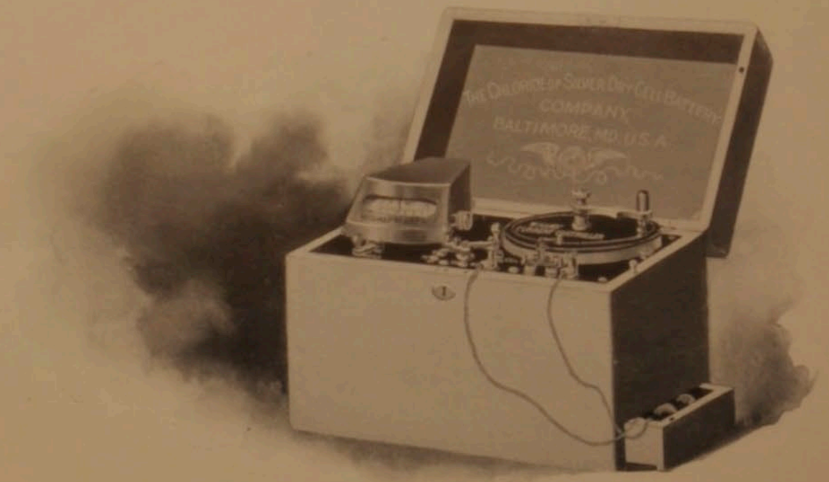
To very sensitive portions of the body it is safe to apply only a limited amount of current; there are many such treatments where it is absolutely imperative to know how much current is being administered. For this purpose the MILAMMETER was devised, an instrument for measuring the quantity of current used. It is included with our No. 11 battery, which is in all other respects a counterpart of the No. 10. The MILAMMETER, described on page 14, is recognized by the electro-therapists as an efficient and accurate instrument.

CATAPHORESIS.

Because of the absolute constancy of the CHLORIDE OF SILVER DRY CELLS and the exactness with which infinitesimally small currents can be administered through the use of the WILLMS CURRENT CONTROLLER, the most eminent dentists in the profession have pronounced our batteries the best procurable for Cataphoric work.

The danger of shock is entirely eliminated, and the most sensitive and nervous patients submit to the application without fear of evil results.

The 25 cell No. 11 or No. 10 are preferable for Dental Cataphoresis, the former is preferred as the MILAMMETER is in circuit and the operator can at all times observe and regulate at will the amount of current passing. When ordering Cataphoric outfits —specify "DENTAL".

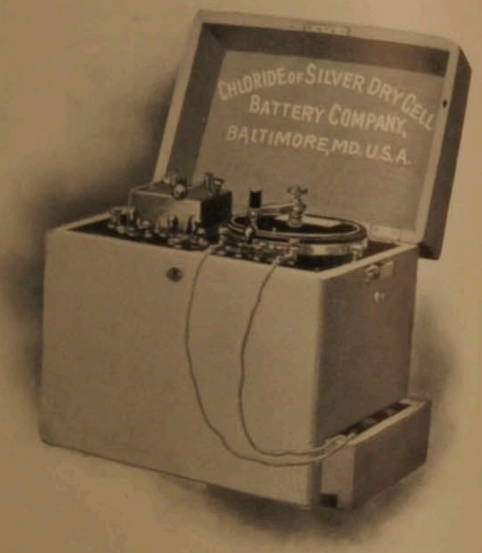


Code	Size	Compactness	Portability	Price
Caste	25 cell	13x8¾x11¼	17 lbs.	$63.00
Castle	35 "	13x8¾x11¼	18 "	72.00
Castor	50 "	13x8¾x11¼	19½ "	85.00
New Galvanic Cells in exchange for exhausted, each				.30

GALVANIC BATTERY No. 15

This outfit is identical with the No. 10, having in addition an AUTOMATIC RHEOTOME with a switch for placing it in or out of the circuit as the operator may decide. This instrument is useful in such treatments as require a wide variation of interruptions, such as partial paralysis or muscular troubles. It is of vast importance in the treatment of paralysis and for diagnostic purposes, and can be used with either the galvanic or faradic current.

The switches for introducing the RHEOTOME into the circuit can be set to interrupt the current from six times to nine hundred times per minute, and the regularity of these interruptions is precise and accurate.

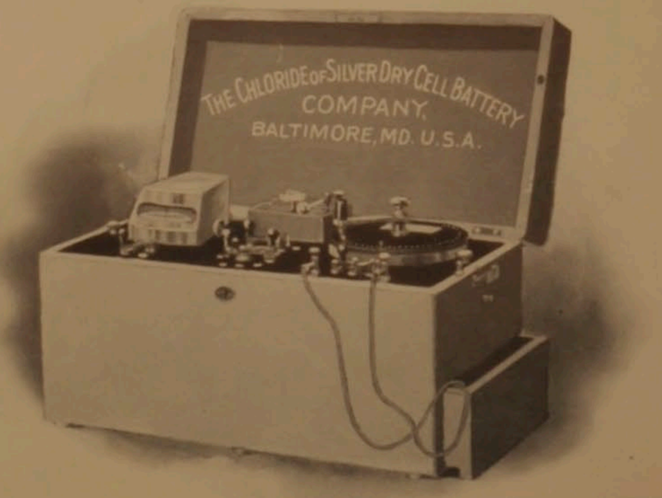


Code	Size	Compactness	Portability	Price
Catch	25 cell	13x8¾x11¼	16¼ lbs.	$53.00
Cater	35 "	13x8¾x11¼	17½ "	62.00
Cause	50 "	13x8¾x11¼	18¾ "	75.00
Cadet—New Galvanic Cells, each				.90
New Galvanic Cells in exchange for exhausted, each				.30

GALVANIC BATTERY No. 16

What has been said of the Nos. 11 and 15 batteries applies with equal emphasis to the No. 16, which is in reality a combination of the two instruments. It is the most elaborate galvanic battery made by us, and responds to any demand where the constant current only is needed. While some classes of work require cells and a Current Reverser only, yet other treatments demand also the Controller; then again a Meter is necessary, while at times a Rheotome is imperative.

The varied usefulness of these instruments is now fully understood, and physicians realize the desirability of having them all combined in a single battery so compact, yet so light in weight as to be readily portable.

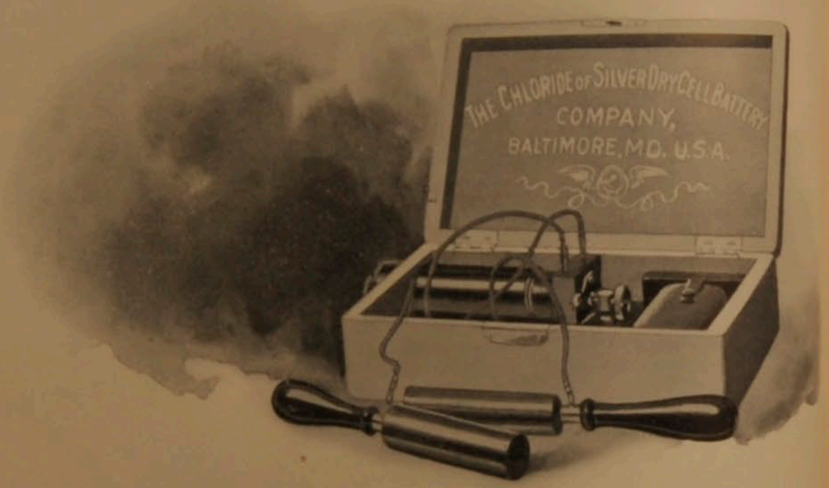


Code	Size	Compactness	Portability	Price
Chain	25 cell	18x9½x10¼	20½ lbs.	$73.00
Champ	35 "	18x9½x10¼	21½ "	82.00
Chase	50 "	18x9½x10¼	23 "	95.00
New Galvanic Cells in exchange for exhausted, each				.30

"LORD BALTIMORE" FARADIC BATTERY No. 7A

It frequently becomes necessary for the physician to prescribe for the patient the use of a faradic battery at home to augment his treatment. Where a mild current is required our "LORD BALTIMORE" will prove a valuable assistant, offering in the one instrument the primary, the secondary and the combined current. Though it is the cheapest of all our batteries, the same general excellence of construction is given, and not only is the original cost within the reach of all, but it is most economical to maintain, costing about two cents for each hour of actual service.

The case is of mahogany, handsomely polished, and in it will be found a pair each of silk conducting cords, nickel-plated brass handles and ebonized wood handles.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY,
BALTIMORE, MD. U.S.A.

MAINTENANCE
2 CENTS PER HOUR

Code	Compactness	Portability	Price
Eager	8x4⅞x2⅛	2 lbs.	$6.50
New Faradic Cell Cases in exchange for exhausted, each			.75
By mail, extra, each			.07

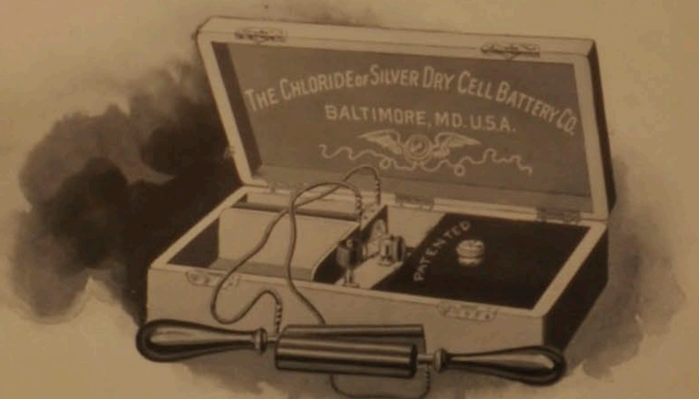
"POCKET" FARADIC BATTERY No. 7

Probably no one of our batteries has proven its usefulness so thoroughly as our "POCKET," and it can be found safely stored in the emergency satchel of most physicians. Not only is it the doctor's favorite for his own practice, but it receives his earnest recommendation for family use where treatments require moderate strengths of current.

The coil offers three separate currents—primary, secondary and combined, wound to suit the requirements of ordinary treatments and emergency cases.

The case is of mahogany, beautifully finished, and with it is furnished a pair each of silk conducting cords, nickel-plated handles, ebonized wood handles and flannel covered carbon electrodes.

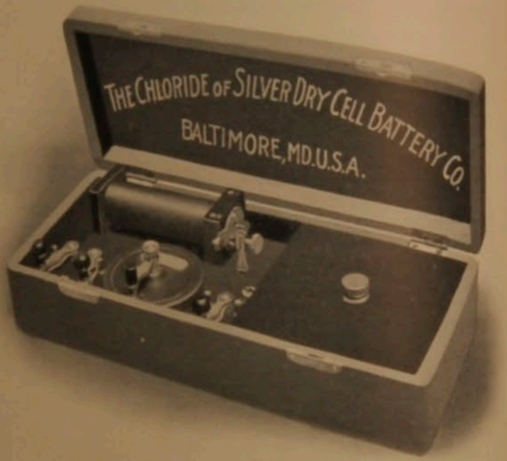
The life of the battery is about one hundred hours of actual service. When the two cell cases are exhausted, they can be exchanged for new ones for one dollar and fifty cents, making the cost of operating only 1½¢ per hour.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.
PATENTED

NO WASTE
WHEN NOT IN USE

Code	Compactness	Portability	Price
Earn	9⅞x4⅝x2⅛	2¼ lbs.	$10.00
New Faradic Cell Cases in exchange for exhausted, per pair			1.50
By mail, extra, per pair			.13

FARADIC BATTERY No. 20



This battery was constructed at the suggestion of one of our ablest practitioners in electro-therapy, to whom we would gladly extend the credit publicly by appending his name, but who modestly insists that this shall not be done.

Its chief features of superiority over the "POCKET" are that twice the current strength can be had on demand, and the current is regulated by the Willms Controller, which insures a gradual increase without the slightest jerk or shock.

In size and shape it is very convenient, occupying but a small space in the satchel.

With it are provided a pair each of silk conducting cords, nickel-plated handles, ebonized wood handles and best sponge electrodes.

The cost of operating is about 1½¢ for each hour of actual service.

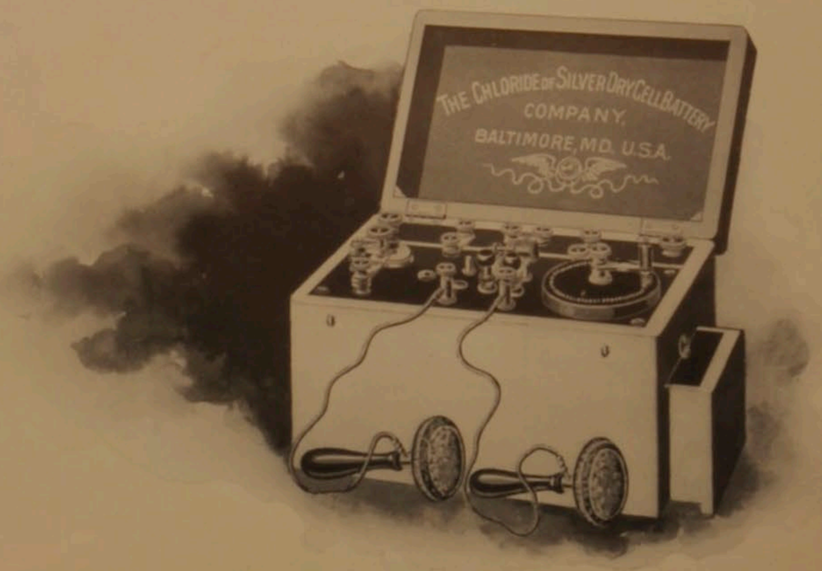
Code	Compactness	Portability	Price
Eaves	11x5⅛x3⅛	4 lbs.	$18.00
New Faradic Cell Cases in exchange for exhausted, per set of four .			3.00
By mail, extra, per set			.25

"UPRIGHT" FARADIC BATTERY No. 6

The No. 6 was designed to meet the demand for a moderate strength battery that could be perfectly controlled in the application of the current. It is similar in coils and current strength to the "POCKET", but the arrangement differs and the introduction of the proper switches and the Controller necessitates a larger case to properly contain them.

By the use of the Willms Current Controller, the super-sensitive portions of the body may receive mild current applications, and the most nervous patient can be treated, experiencing no inconvenience or annoyance.

The case is of polished mahogany, and in the electrode drawer will be found one pair each of silk covered conducting cords, insulated wood handles, sponge electrodes and nickel-plated handles.

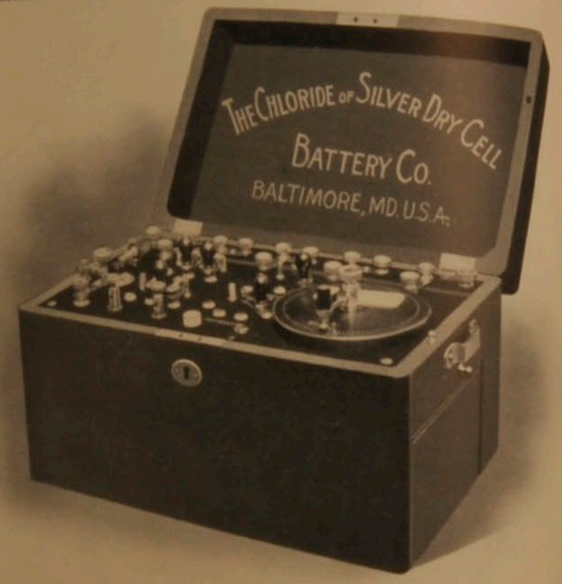


One Hundred Hours of Actual Service at a Cost of 1½¢ Per Hour . . . . .

Code	Compactness	Portability	Price
Earth	9¼x5¾x7	5½ lbs.	$15.00
New Faradic Cell Cases in exchange for exhausted, per pair			1.50
By mail, extra, per pair			.13

FARADIC BATTERY No. 9

The No. 9 was formally launched just five years ago, and in that time it has become the most popular and satisfactory faradic machine ever offered to the medical profession. We have numerous testimonials to this effect, expressive of approval in no uncertain way, and stamping it as the highest achievement of technical and mechanical skill in the production of electro-therapeutic apparatus.



It is operated by four cell cases attached to a supporting plate at the rear, and hidden from view. A selecting switch permits the use of either two, three or four cells as may be required.

Four coils are supplied—a primary, and three secondaries—of approved diameter and length of wires, the third secondary being extremely high tension, capable of glowing a Geissler Tube. Two sets of switches control these coils, placing seven distinct currents at the disposal of the operator.

The current flow is graduated and governed by the Willms Current Controller, medium size, which offers a larger range of control than can be had in the No. 14.

A Current Reverser is provided which permits the change of polarity without removing the electrodes from the patient; also an interrupting button, known as a Contact Breaker, very useful for diagnostic purposes and in paralysis.

The utmost diligence and care have been employed in the arrangement of all switches and connections with the ultimate object of presenting their various offices as simply and concisely as possible.

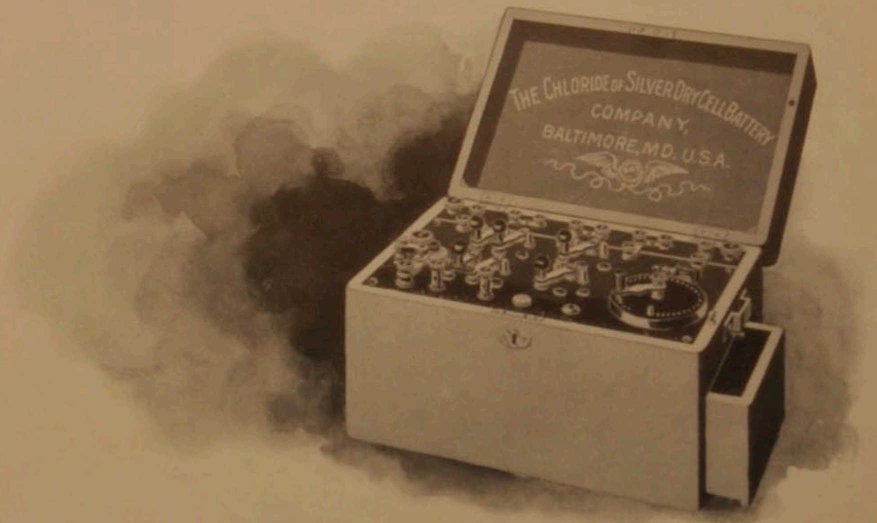
The battery case is of mahogany, highly polished, and in the drawer will be found the usual accessories.

One Hundred Hours of Actual Service
1½¢ Per Hour

Code	Compactness	Portability	Price
Ebony	11⅞x7⅝x7¼	10 lb.	$25.00
New Faradic Cell Cases in exchange for exhausted, per set of four			3.00
By mail, extra, per set.			.25

FARADIC BATTERY No. 14

A prominent physician—an expert electro-therapist—says: "This is the ideal faradic machine, and I have never had a case which I could not treat exhaustively with my number 14." It is truly complete, not only in current strength and coils, but the switches are so nicely and simply arranged that a child should easily learn to operate it after reading the directions.



There are four cell cases with a selecting switch, permitting the use of either two, three or four cell cases. The coil consists of a primary and two secondaries, placing five individual currents in the circuit by easy adjustment of the switches.

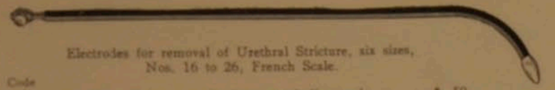
The entire battery closely resembles the No. 9, but the Controller is of a smaller size, offering less range of control, and the extra high tension coil is lacking.

It contains besides a Current Reverser and Contact Breaker, both useful and necessary adjuncts.

The case is of mahogany, and the electrodes in the drawer are one pair each of silk covered conducting cords, best quality sponge electrodes, one ebonized plain handle, one ebonized interrupting handle.

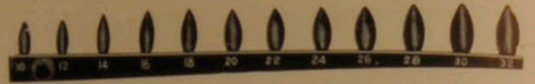
One Hundred Hours
1½¢ Per Hour

Code	Compactness	Portability	Price
Easy	10¾x7⅜x7	8½ lbs.	$20.00
New Faradic Cell Cases in exchange for exhausted, per set of four			3.00
By mail, extra, per set.			.25

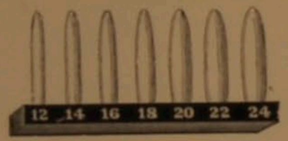


Electrodes for removal of Urethral Stricture, six sizes, Nos. 16 to 26, French Scale.

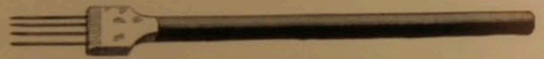
Code			
Fistic	—No. 64.	Curved, insulated stem and olive, each	$ .50
Hitch	—No. 316.	Set of six in case	3.75
Hymen	—No. 194.	Straight, insulated stem and olive, each	.50
Hoard	—No. 317.	Set of six in case	3.75
Hiss	—No. 315.	Set of six each, curved and straight	7.50



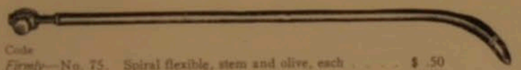
Code			
Flabby	—No. 76.	One dozen Assorted Olives with No. 64 stem, straight or curved	$2.00
Flag	—No. 195.	One dozen Assorted Olives, only	1.50
Flake	—No. 56.	Assorted Olives, round or pointed, each	.15



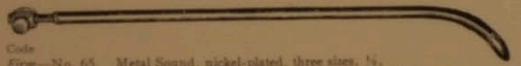
Code			
Half	—No. 103.	Set of seven olives with two insulated stems, in Copper	$2.50
Inert	—No. 260.	Same in Zinc	2.50



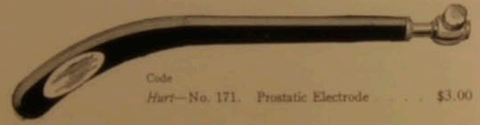
Code			
Hedge	—No. 134.	Hemorrhoidal Needle Holder, Chuck Screw for fastening, with four needles	$2.00
Heed	—No. 135.	Same, to hold eight needles	2.50



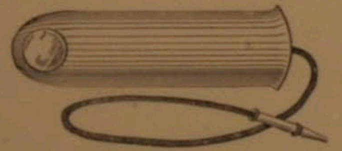
Code			
Firmly	—No. 75.	Spiral flexible, stem and olive, each	$ .50
Keep	—No. 325.	Set of six ip case	3.75



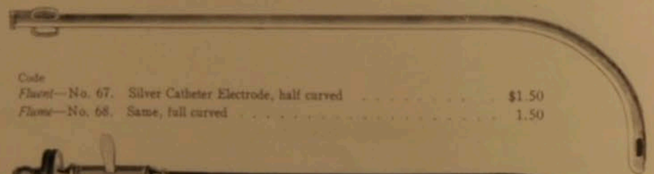
Code			
Firm	—No. 65.	Metal Sound, nickel-plated, three sizes, ¼, 3/16, ⅛ inch diameter, each	$ .50
Incite	—No 252.	Same, in Copper, each	.75



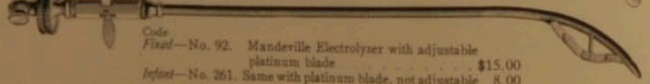
Code			
Hurt	—No. 171.	Prostatic Electrode	$3.00



Code			
Hence	—No. 138	Walker Prostate Massage Electrode, soft rubber finger cot, with metal disc	$1.00



Code			
Fluent	—No. 67.	Silver Catheter Electrode, half curved	$1.50
Flume	—No. 68.	Same, full curved	1.50



Code			
Fixed	—No. 92.	Mandeville Electrolyser with adjustable platinum blade	$15.00
Infant	—No. 261.	Same with platinum blade, not adjustable	8.00

Code			
Fetch	—No. 50.	Vaginal Electrode, large, all metal	$ .60
Fit	—No. 183.	" " small, " "	.60
Insult	—No. 243.	" " all copper	1.00
Impel	—No. 244.	" " all zinc	1.00
[illegible]	—No. 258.	All Carbon	.75

Code			
Hide	—No. 142.	Curved Vaginal Electrode, large, all metal	$1.00
Husk	—No. 185.	" " " small, " "	1.00
[illegible]	—No. 245.	" " " all copper	1.50
Import	—No. 246.	" " " all zinc	1.50

Code			
Fervid	—No. 49.	Vaginal Electrode, partly insulated	$1.50
Influx	—No. 267.	Same, in Copper	1.75

Code			
Fife	—No. 74.	Bipolar Vaginal, olive shaped poles	$2.00
Inlet	—No. 256.	Same, in Copper	2.50

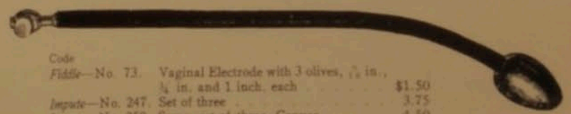
Code			
Fib	—No. 51.	Vaginal Electrode, large, cylindrical head, insulated stem	$1.50
Infold	—No. 268.	Same, in Copper	1.75
Fibre	—No. 184.	Same, smaller head	1.50
Inform	—No. 269.	Same, in Copper, smaller head	1.75

Code			
Field	—No. 86.	Monopolar Vaginal, finely polished handle	$1.50
Infuse	—No. 270.	Same, in Copper	2.00

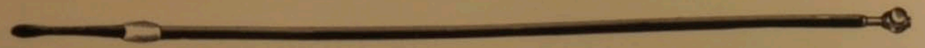
Code			
Fight	—No. 52.	Bipolar Vaginal, insulated between poles	$2.00
Ingulf	—No 271.	Same, in Copper	2.50

Code			
Fidget	—No. 90.	Monopolar Vaginal Electrode, olive end	$1.50
Inane	—No. 248.	Same, in Copper	1.75

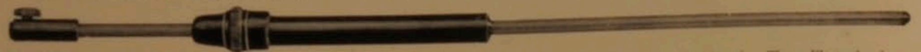
Code			
Fickle	—No. 72.	Vaginal and Os Uteri Combined Electrode	$1.50
Inca	—No. 249.	Same, in Copper	1.75



Code			
Fiddle	—No. 73.	Vaginal Electrode with 3 olives, 11/16 in., ¾ in. and 1 inch, each	$1.50
Impute	—No. 247.	Set of three	3.75
Incest	—No. 250.	Same, set of three, Copper	4.50

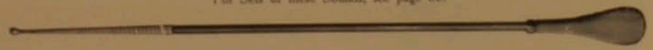


Code			
Hark	No. 113.	Urethral Electrode, straight, insulated tapered ends, in six sizes, Nos. 16 to 26 French Scale, each	$1.25
Kale	No. 322.	Set of six, in case, Nickel-plated or Copper	8.00

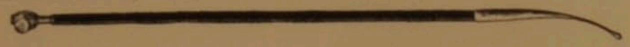


Code			
Fisk	No. 93.	Sounds for Chemical Electrolysis of the urethra, with adjustable rubber muff to slide and fasten at any desired length. These Electrodes have earned a deserved reputation, and they are undoubtedly the very best adapted to Gautier's Method. In copper, each	$1.50
Income	No. 254.	Same in Zinc	1.50
Incurve	No. 255.	Same in Block Tin	1.50

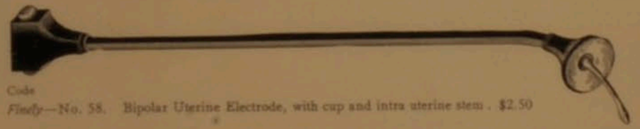
For Sets of these Sounds, see page 60.



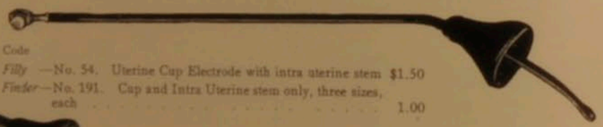
Code			
Fleish	No. 55.	Spiral Flexible, Intra Uterine Electrode, Insulated	$1.50



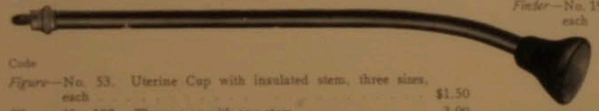
Code			
Fired	No. 43.	Inflexible Intra Uterine Electrode. Insulated	$1.00



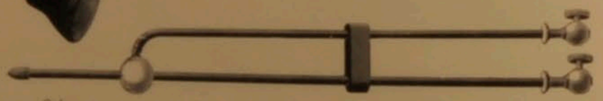
Code			
Fledy	No. 58.	Bipolar Uterine Electrode, with cup and intra uterine stem	$2.50



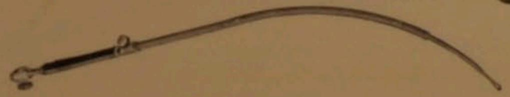
Code			
Filly	No. 54.	Uterine Cup Electrode with intra uterine stem	$1.50
Finder	No. 191.	Cup and Intra Uterine stem only, three sizes, each	1.00



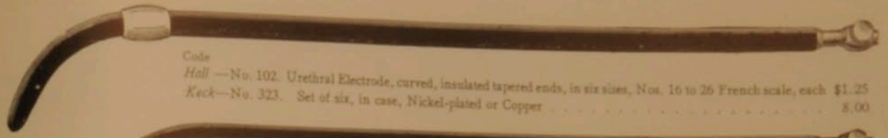
Code			
Figure	No. 53.	Uterine Cup with insulated stem, three sizes, each	$1.50
File	No. 192.	Three cups with one stem	3.00



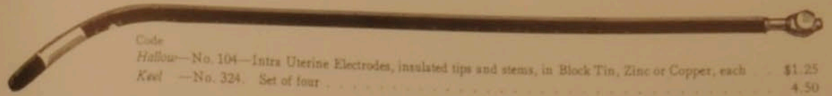
Code			
Finger	No. 57.	Bipolar Intra Uterine and Extra Uterine Electrode, adjustable	$3.00



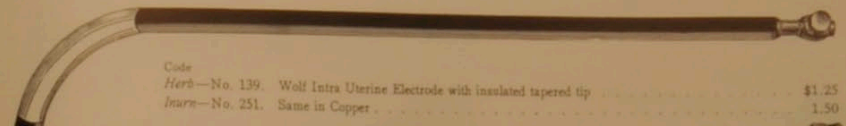
Code			
Hive	No. 148.	Double Flexible Intra Uterine Electrode	$3.00



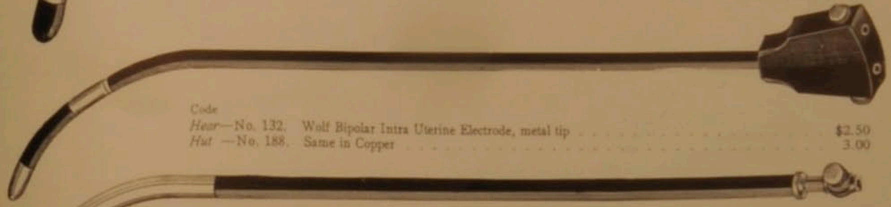
Code			
Hall	No. 102.	Urethral Electrode, curved, insulated tapered ends, in six sizes, Nos. 16 to 26 French scale, each	$1.25
Keck	No. 323.	Set of six, in case, Nickel-plated or Copper	8.00



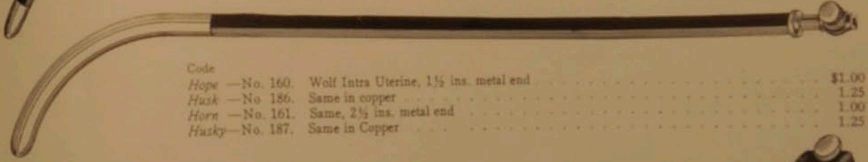
Code			
Hallow	No. 104	Intra Uterine Electrodes, insulated tips and stems, in Block Tin, Zinc or Copper, each	$1.25
Keel	No. 324.	Set of four	4.50



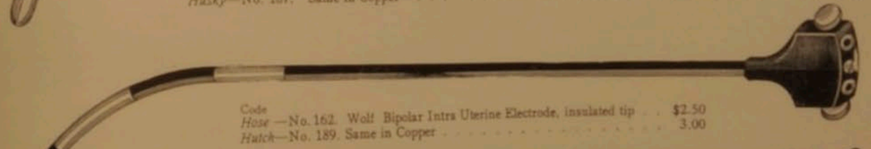
Code			
Herb	No. 139.	Wolf Intra Uterine Electrode with insulated tapered tip	$1.25
Inurn	No. 251.	Same in Copper	1.50



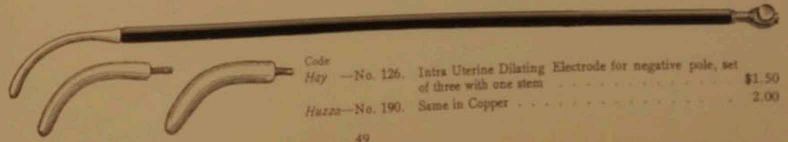
Code			
Hear	No. 132.	Wolf Bipolar Intra Uterine Electrode, metal tip	$2.50
Hut	No. 188.	Same in Copper	3.00



Code			
Hope	No. 160.	Wolf Intra Uterine, 1½ ins. metal end	$1.00
Husk	No 186.	Same in copper	1.25
Horn	No. 161.	Same, 2½ ins. metal end	1.00
Husky	No. 187.	Same in Copper	1.25



Code			
Hose	No. 162.	Wolf Bipolar Intra Uterine Electrode, insulated tip	$2.50
Hutch	No. 189.	Same in Copper	3.00



Code			
Hay	No. 126.	Intra Uterine Dilating Electrode for negative pole, set of three with one stem	$1.50
Huzza	No. 190.	Same in Copper	2.00

COMBINED GALVANIC AND FARADIC BATTERY No. 17

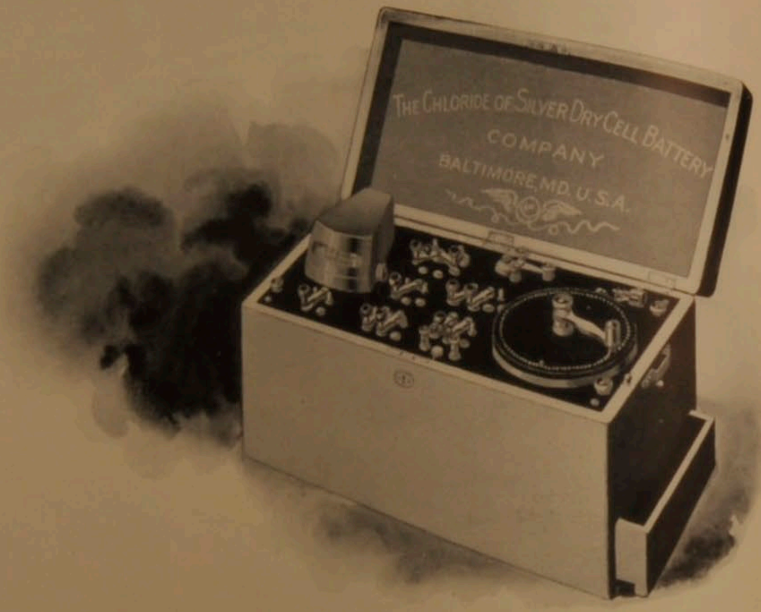
Of all the many instruments we have been called on to design for specialists, the surpassing features of this battery at once appealed to us so convincingly that we decided to manufacture it regularly.

Since it has been catalogued, just seven years, the demand for the No. 17 has shown beyond doubt the wisdom of this move. Any number of testimonials are on file from the very best members of the profession, who speak of it as a model of completeness in every detail.

The Combination is our Nos. 11 and 9 with all the distinctive features of these instruments in so small a space that the fifty cell outfit weighs but 24½ lbs.

It is identical with the No. 19 with the addition of the Milammeter; and it is this addition that makes it so well adapted to the needs of the physician. A prominent user says:—"It is absolutely necessary to have some means of determining how much current is flowing, for it is the current that does the work."

The style of the case and the electrodes is similar to all our combined battery outfits.



Code	Size	Compactness	Portability	Price
Glad	25 cell	18x9½x10¼	22 lbs.	$75.00
Glaze	35 "	18x9½x10¼	23 "	85.00
Gleam	50 "	18x9½x10¼	24½ "	100.00

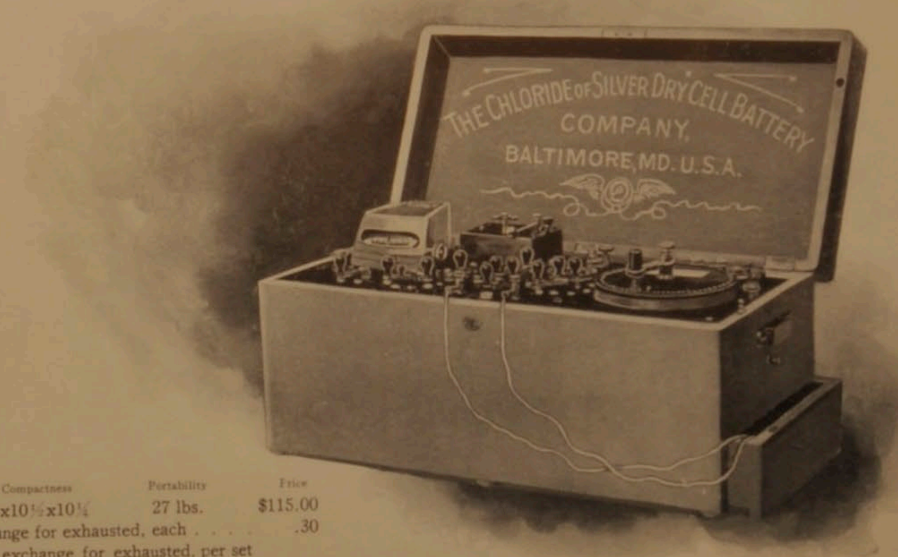
New Galvanic Cells in exchange for exhausted, each	.30
New Faradic Cell Cases in exchange for exhausted, per set of four	3.00

COMBINED GALVANIC AND FARADIC BATTERY No. 13

We here illustrate the grand combination of all batteries. Not alone the galvanic and faradic currents—that may be applied separately or in unison and the faradic induction coils with nineteen distinct kinds of current, each one ready with the movement of a lever to respond accurately—but there is in this battery every improvement known to electro-therapy. The useful Automatic Rheotome, the superb Controller, the accurate Milammeter, the essential Current Reverser and Contact Breaker are all necessary, and will be found doubly convenient when placed permanently in the circuit.

The No. 13 is as far as we can go—IT IS PERFECT. It combines Nos. 16 and 8, descriptions of which are given elsewhere.

The case is of mahogany, beautifully finished, and in the drawer are provided the usual accessories.



Code	Size	Compactness	Portability	Price
Glory	50 cell	21x10½x10¼	27 lbs.	$115.00

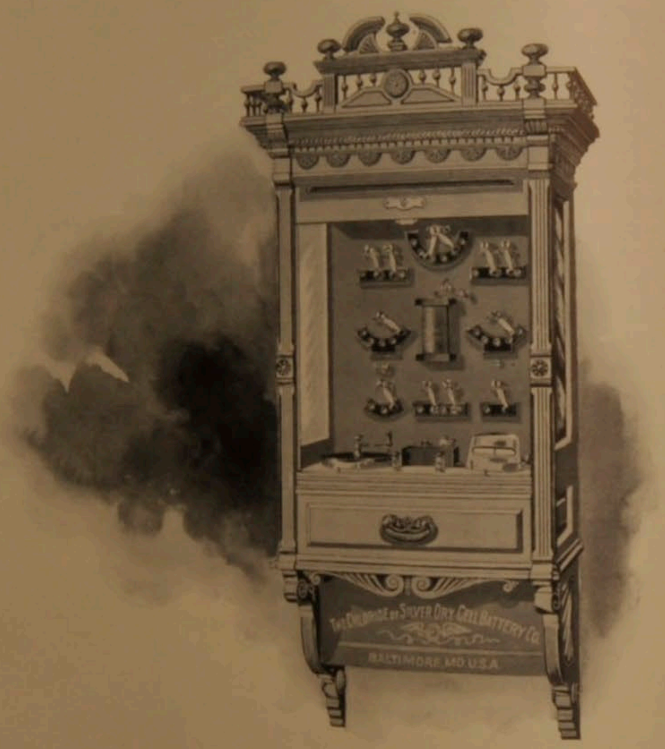
New Galvanic Cells in exchange for exhausted, each	.30
New Faradic Cell Cases in exchange for exhausted, per set of four	3.00

WALL CABINET

In the description of the combined batteries every useful feature has been dwelt upon, perhaps none too well. If so, our secretaries are ever ready to respond to any questions you may care to propound.

The Cabinets that follow are merely combined batteries (the No. 13) with the various switches on an enlarged scale, and all artistically arranged to present an imposing appearance. The Wall Cabinet is furnished in mahogany or in quartered oak, beautifully finished, and becomes a very attractive adjunct to any office.

The drawer in the front contains the usual assortment of electrodes and accessories.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

Code—*Gloss.*
Dimensions, 49x22½x13½ inches.
Price, complete, $150.00.

TABLE CABINET

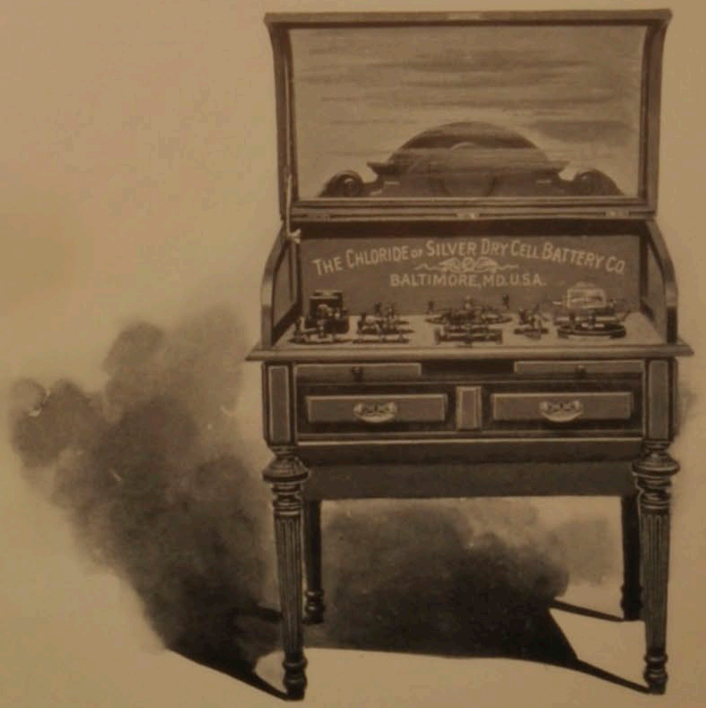
The Table Cabinet was introduced to meet the wants of specialists, but can be seen in the offices of many physicians engaged in general practice. The original model was constructed for the Johns Hopkins Hospital of Baltimore, seventeen years ago, and is still doing daily service in that institution.

Six cell cases are supplied for faradic work and for extreme cases.

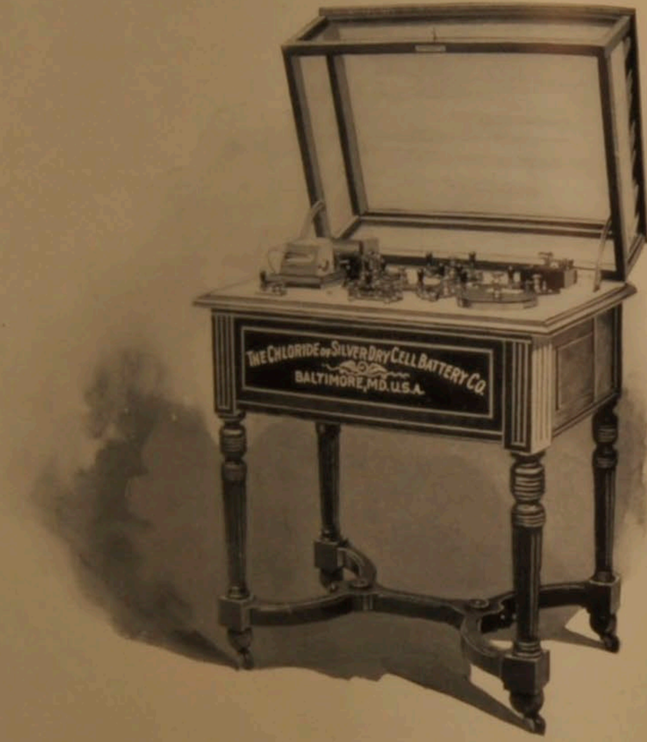
The same general excellence of design, construction and finish as characterizes all our product is embodied in these cabinets, and the result is a most imposing and impressive apparatus.

The wood work is of select quartered oak, but it is also furnished to order in mahogany, elegantly carved, artistically trimmed and finished. The glass, both the sides and the curved cover, is heavy plate with broad bevel. Two drawers open from the front in which the electrodes and accessories are stored.

Code	Size	Compactness	Price
Glottis	50 cell	48x35½x20¾	180.00
Glowing	100 "	48x35½x20¾	$225.00


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

HOSPITAL WARD ROLLING TABLE



The first of these Tables, like the preceding Cabinet, was designed for use in the Johns Hopkins Hospital. The Cabinet Table is a permanent fixture for the dispensary or office, but when electric treatments are required at the bedside the Rolling Table is far more convenient.

The two are identical in electrical equipment, complete with Controller, Meter, Rheotome and all the necessary switches.

The frame rests on rubber covered wheels, so that it can be moved through the wards from room to room, noiselessly and with ease.

The wood work is of quartered oak, though it can be furnished to order in mahogany; the glass is heavy beveled plate. Into each side runs a drawer for holding the usual assortment of electrodes and accessories.

Code	Size	Compactness	Price
Gold	50 cell	37½x29¼x20½	$150.00
Golden	100 "	37½x29¼20x½	200.00

ELECTRODES AND ACCESSORIES

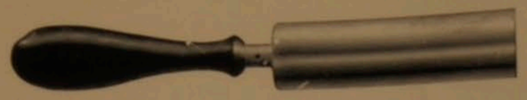
THE claim that we produce only the highest grade of manufacture asserts itself in no department more emphatically than in the production of Electrodes. Recognizing that with these various applicators of the mild electric current rests the responsibility of assured results, none other than the best grade of material, the most skilled and careful workmanship, followed by the smoothest and most durable finish are permitted. The shape and size of Electrodes are prominent factors in determining therapeutic effect, as upon these depend density and resistance; the character and effect of the current, and these points should always be noted for purpose of record and comparison.

A great variety of efficient Electrodes is to be found here described, each serving its special purpose, and the practitioner will soon discover which he most needs. Since the issuance of our last catalogue, we have added to our already immense assortment of electrodes a number of new designs, of which the majority were made at the instance of leading members of the medical profession. In these matters we are always glad to defer to the judgment of the physician, and are more than grateful for any suggestions tending to the improvement or betterment of our instruments. With the most completely equipped factory of its kind in the world, we are enabled to turn out any style of high grade electro-medical work on short notice, and in the matter of specially constructed electrodes, we shall always endeavor to meet the views of the practitioner to the best of our ability.

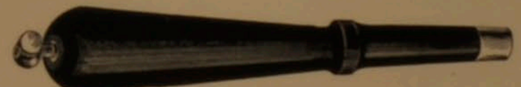
In the list of electrodes following will be noted a large number not to be found in any other catalogue, and of incomparable value in many important cases. We desire to call special attention to our mono-polar and bi-polar Vaginal Applicators, as being constructed on a new principle, original with ourselves. Also to the Copper Electrodes, three sizes, for chemical electrolysis of the urethra. These same sizes and shapes are also furnished in Rolled Zinc or in Block Tin.

All Electrodes of our make, whether wholly of one piece or of several parts, are so accurately constructed as to preclude the possibility of collecting germs in the joints. They may be readily cleaned and, if desired, may be asepticized without fear of injury. All our Electrodes are made with universal connectors so that any make of conducting cords can be used.

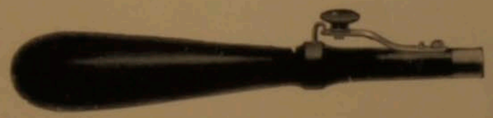
It is our earnest effort to provide every desirable accessory to our batteries that the busiest physician could require. Should there be something not found in our catalogues, however, which in the opinion of any member of the profession would be better or more serviceable for any particular requirement than anything here shown, we shall be under obligations for a description and sketch thereof. With our ample facilities, we could quickly produce a satisfactory model and at reasonable cost.



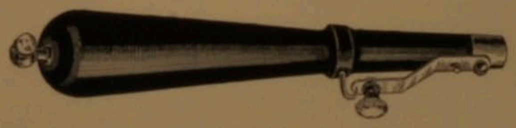
Code			
Face	—No. 41.	Ebonized Wood Handles and Nickel Plated Brass Handles, per set, two of each	$ .60
Facing	—No. 6.	Ebonized Handles, male thread, per pair	.30
Fact	—No. 7.	Nickel Plated Brass Handles, per pair	.30



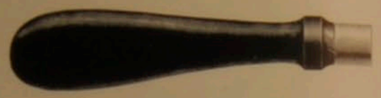
Code			
Haughty	—No. 122.	Hard Rubber Plain Handle, Universal Connector	$1.00
Heap	—No. 129.	Same, Ebonized Wood	.75



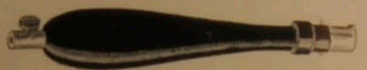
Code			
Fable	—No. 8.	Hard Rubber Universal Handle with Current Breaker	$1.25
Fabric	—No. 10.	Same, Ebonized Wood	.75



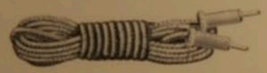
Code			
Haul	—No. 123.	Hard Rubber Universal Interrupting Handle	$1.25
Hearse	—No. 130.	Same, Ebonized Wood	1.00



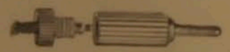
Code			
Fade	—No. 9.	Ebonized Wood Plain Handle, female thread	$ .40
Hough	—No. 165.	Nut Wrench, 7/16 Hexagonal nuts	.40
Hound	—No. 166.	" " 5/16 " "	.40



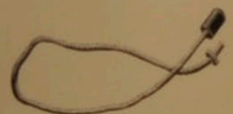
Code			
Help	—No. 136.	Ebonized Wood Universal Handle	$ .35
Infirm	—No. 265.	Same, with interrupter	.50



Code			
Fadge	—No. 12	Silk Conducting Cords, 10 ft., per pair	$1.00
Fag	—No. 12.	" " " 8 " " "	.85
Fagot	—No. 12.	" " " 5 " " "	.65
Fail	—No. 12.	" " " 3½ " " "	.55
Induct	—No 259.	Cabinet Conducting Cords, Extra Heavy Silk Covered, 8 ft., per pair	1.25
Facade	—No. 3.	Bifurcated Conducting Cords, 5 ft., per pair	1.25
Facet	—No. 3.	" " " 8 " " "	1.50
Fagend	—No. 158.	Double Conductor " 5 " " "	1.00

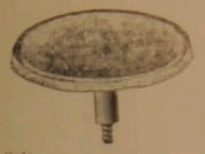


Code
Fiddle—No. 4. Adjustable Cord Tips, per pair . . . . $ .15

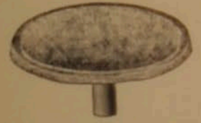


Code
Fair—No. 5. Silk Selecting Cords used in No. 1 Batteries, per pair . . . . . . $ 1.00

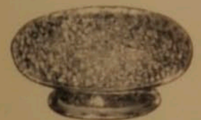
All our Sponge Electrodes are made of Select Mediterranean Stock. Sponge Plates, Sponge or Spongio Piline Covered Electrodes of any size made to order.



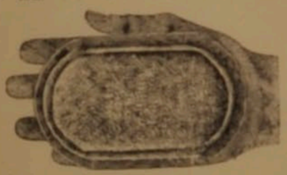
Code
Fall—No. 37. Sponge Electrode, Rubber Back, male thread, each . . . . . . $ .35



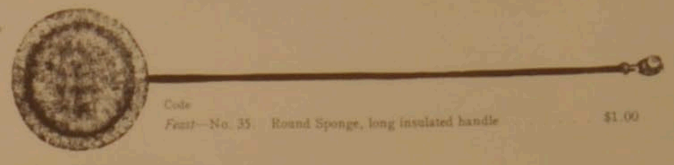
Code
Flamb—No. 61. Sponge Electrode, Rubber Back, female thread, each . . . . . . $ .35



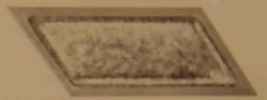
Code
Faller—No. 36. Sponge Electrode, wood knobs, each . . . . . . $ .35



Code			
Fear	—No. 34.	Oval Sponge, Rubber Back, large	$1.00
Idiot	—No. 235.	Same, Common Sponge	.75
Idle	—No. 236.	Same, Spongio Piline	.60

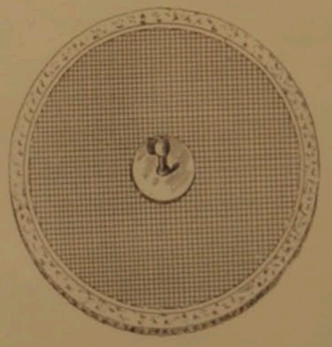


Code
Feast—No. 35. Round Sponge, long insulated handle $1.00

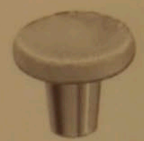


Code			
Fellow	—No. 38.	Sponge, Rubber Back, 3x5 ins	$1.00
Fence	—No. 39.	" " " 2x4 "	.90

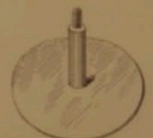
Code					
From	—No. 40.	Cabinet Flat Sponge	The sponge is stitched to a metal back and can be easily renewed	Size P, 4½x4½ ins	$1.50
Front	—No. 40.	" " "		" Q, 5¼x2¾ "	1.50
Frost	—No. 40.	" " "		" R, 4½x2½ "	1.25
Frou	—No. 40.	" " "		" S, 2¼x2 "	.75
Froze	—No. 40.	" " "		" T, 1⅝x1½ "	.75



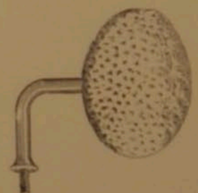
Code
Hire—No. 146. Abdominal Pad covered with Spongio Piline, diam. 8 ins . . . $1.50



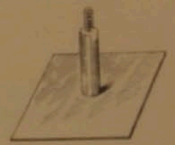
Code
Faith—No. 88. Carbon, Flannel covered, each . . . . $ .25



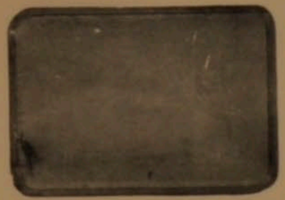
Code
House—No 167. Metal Plate, small round. $ .25



Code
Hew—No. 141. Angle Sponge, each . . . . $ .50

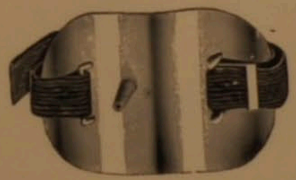


Code
House—No. 168. Metal Plate, small square $ .25

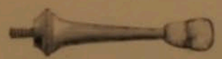


No. 85. Felt Covered Electrodes, Soft Rubber Backs, six sizes

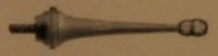
Code		
Famous—Size A, 3¼ x2¾ ins	. . . .	$ .50
Fancy — " B, 4¾ x3½ ins	. . . .	.60
Fang — " C, 5½x3¾ ins	. . . .	.75
Far — " D, 7 x5 ins	. . . .	.90
Force — " E, 8 x5¼ ins	. . . .	1.00
Farmer— " F, 9 x6½ ins	. . . .	1.25



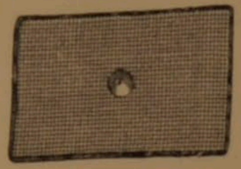
Code
Force—No. 32. Wrist or Neckband Electrode, adjustable $1.00



Code
Flatus—No. 79. Erb Electrode, Sponge tipped, large . . . . $ .25

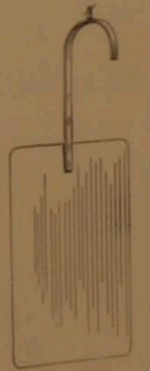


Code
Flavor—No. 80. Erb Electrode, Sponge tipped, small . . . . $ .25

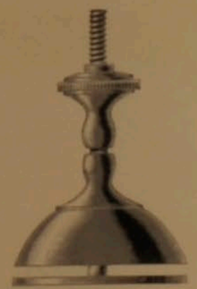


No. 13. Wire Gauze Dispersive Electrodes.

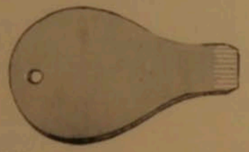
Code		
Fashion—Size G, 3x 4 ins	. . . .	$ .40
Fast — " H, 4x 5 "	. . . .	.40
Fasten — " I, 4x 6 "	. . . .	.50
Fat — " K, 5x 7 "	. . . .	.60
Fetter — " L, 6x 8 "	. . . .	.60
Fathom — " M, 6x12 "	. . . .	.75
Favor — " N, 8x10 "	. . . .	.90
Fawn — " O, 8x12 "	. . . .	1.00



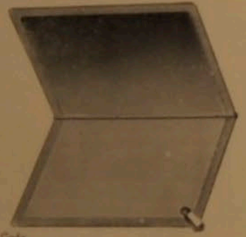
Code
Humid—No. 175. Bath Tub Electrodes, movable, per pair . $3.00



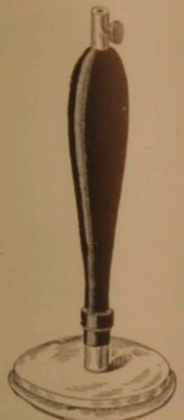
Code
Foal—No. 28. Universal Sponge or Lint Holder $1.00



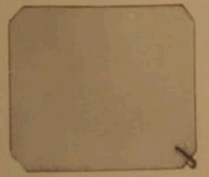
Code
Hotel—No. 164. Screw Driver . . $ .25



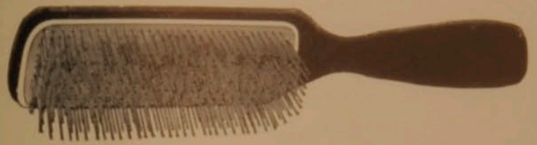
Code
Feeler—No. 31. Foot Plate, folding, with movable flannel cover, rubber back . . . . . . $ 2.00



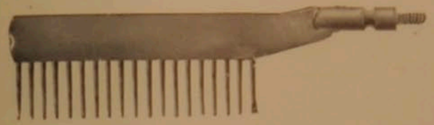
Code
Honey—No. 156. Universal Sponge or Lint Holder and handle . . . . . $ .75



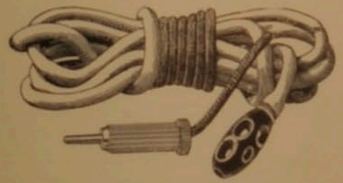
Code
Feed—No. 29. Foot Plate, Zinc, large . . . . . $ .50
Flair—No. 66. Foot Plate, Zinc, small . . . $ .25
Few—No. 30. Foot Plate, Copper, nickel-plated. $1.00



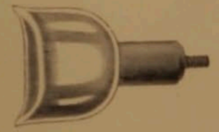
Code
Ferry—No. 46. Hair Brush Electrode . . . . $ .75
Host —No. 163. " " " small 60



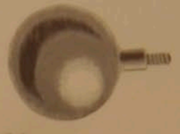
Code
Flux —No. 45. Comb Electrode, large . . . . $ .75
Flurry—No. 44. " " small 60



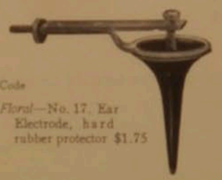
Code
Fly—No. 91. Einhorn Stomach or Gastric Electrode, very small end, easily swallowed $2.00



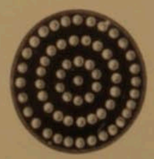
Code
Flaw—No. 14. Eye Cup Electrode . . . . $ 1.00



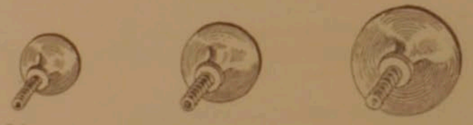
Code
Flyer—No. 42. Metal Ball Electrode . $ .40



Code
Floral—No. 17. Ear Electrode, hard rubber protector $1.75

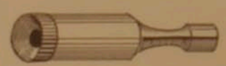


Code
Fluff—No. 25. Disc Rheophore, insulated metal points . . . . . $ .75

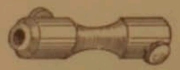


Code
Harder—No. 112. Metallic Discs, oval face, three sizes, each . . $ .25

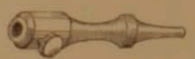
Universal Connectors, Nos. 114 to 120 and 159, each 12c.



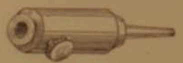
Code
Hate—No. 114.



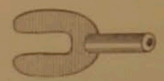
Code
Hart—No. 115.



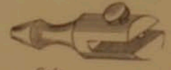
Code
Halter—No. 116.



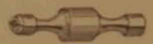
Code
Haste—No. 117.



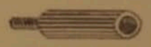
Code
Harp—No. 119.



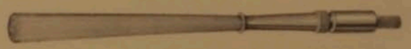
Code
Hatred—No. 120.



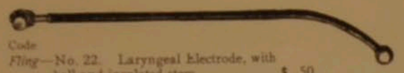
Code
Hasp—No. 118.



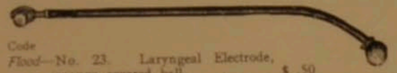
Code
Hook—No. 159.



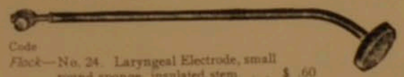
Code
Flute —No. 47. Metallic Brush, stiff . . . . $ .50
Humor—No. 176 " " soft 50



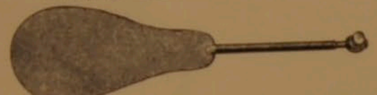
Code
Fling—No. 22. Laryngeal Electrode, with ball and insulated stem . . . . . $ .50



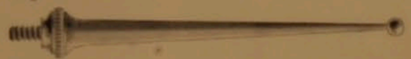
Code
Flood—No. 23. Laryngeal Electrode, sponge covered ball . . . . . $ .50



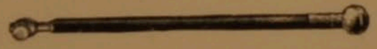
Code
Flock—No. 24. Laryngeal Electrode, small round sponge, insulated stem . . $ .60



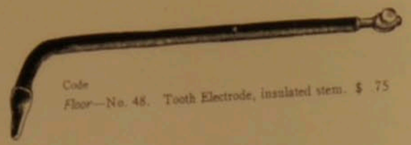
Code
Fledge—No. 21. Tongue Plate, insulated stem . . . . $ .50



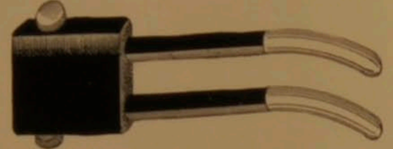
Code
Flayed—No. 16. Ear or Nose Electrode, all metal $ .75



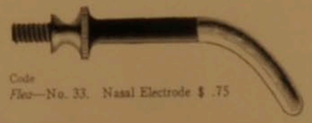
Code
Flatly—No. 15. Eye Electrode, insulated stem . . . . $ .75



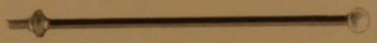
Code
Floor—No. 48. Tooth Electrode, insulated stem. $ .75



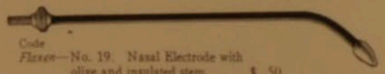
Code
Huff—No. 169. Nasal Electrode, double, in nickel-plated metal or copper $1.50



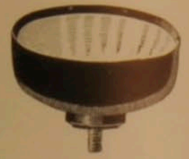
Code
Flex—No. 33. Nasal Electrode $ .75



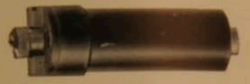
Code
Fleece—No. 20. Tonsil Electrode with ball and insulated stem . . . . $ .50



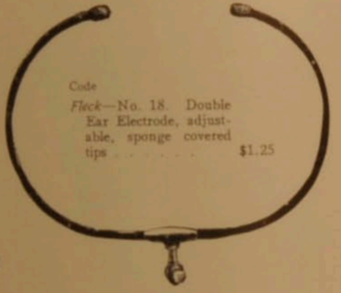
Code
Flaxen—No. 19. Nasal Electrode with olive and insulated stem . . $ .50



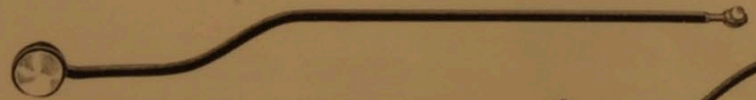
Code
Hair—No. 101. Insulated Cup for Cataphoric Medication, lined with Block Tin . . . $1.50
Inky—No. 274. Same, very shallow 1.50



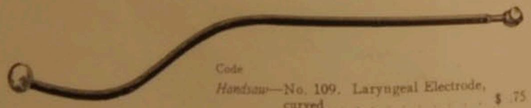
Code
Fame—No. 11. Hard Rubber Water Rheostat $1.00



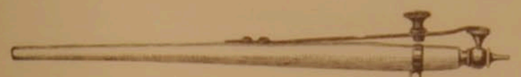
Code
Fleck—No. 18. Double Ear Electrode, adjustable, sponge covered tips $1.25



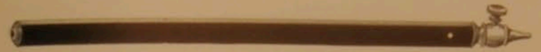
Code
Happy—No. 110. Tonsil Electrode, nickel-plated cup . . . . $ .75
Imbue—No. 242. " " block tin cup 1.00



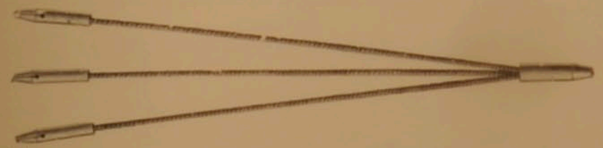
Code
Handsaw—No. 109. Laryngeal Electrode, curved . . . . $ .75



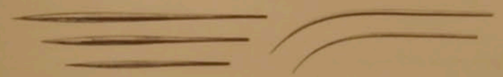
Code
Follow—No. 71. Chisolm Needle Holder, Ivory handle $3.00



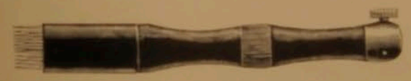
Code
Havoc—No. 124. Needle Holder, Hard Rubber, with set screw . . . . $ .75
Hawk—No. 125. Same, with Interrupter. Will hold either broach or fine needles . . . 1.00



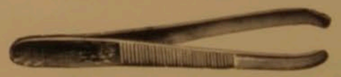
Code
Fold —No. 70. Cord and Tip Needle Holders, to hold 1 (U), 2 (V), 3 (W), 4 (X), 5 (Y) or 6 (Z) needles. Price, without needles . 20c., 30c., 40c., 50c., 60c. and $ .70



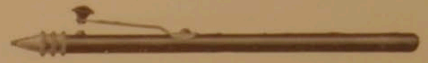
Code
Foyson—No. 69. Gold Plated Needles, insulated, each 45



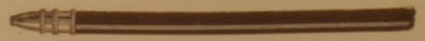
Code
Flash—No. 26. Needle Holder, for removing Naevus or Wine Marks. Needles are protected by shield, which can be lowered or raised by screw chuck to any desired depth $2.50



Code
Hatch—No. 121. Epilating Forceps . . . . . $ .40



Code
Formal—No. 78. Needle Holder, Hard Rubber, with interrupter $1.00
Hurra—No. 182. Same, to hold broach needles 1.00



Code
Forbid—No. 181. Needle Holder without interrupter . . . $ .75

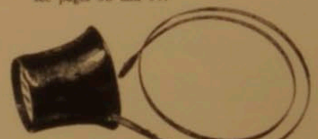
NEEDLES.

Code
Fork —No. 83. Steel Needles for removing hair, each . . $ .05
Foster—No. 239. " " " " " per dozen .50
Found—No. 84. Platinum" " " " each . . .25

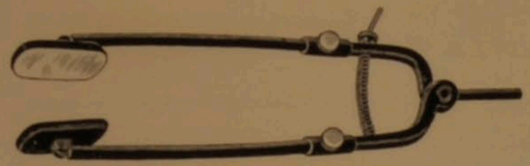
BROACH NEEDLES.

Code
Hazel—No. 127. Broach Steel Needles, each . . . . . . $ .05
Ill —No. 240. " " " per dozen 50
Head —No. 128. " " " bulbous pointed, each 10
Image—No. 241. Broach Steel Needles, bulbous pointed, per dozen 1.00
Hem —No. 137. Broach Platinum Needles, each 40

For Cases containing Holders and Needles, complete outfits, see pages 56 and 59.

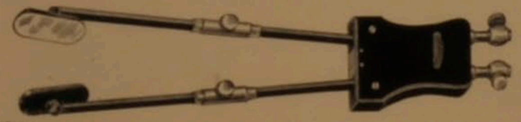


Code
Frame—No. 89. Self-Holding Lens, very useful in removing superfluous hair, each $1.00



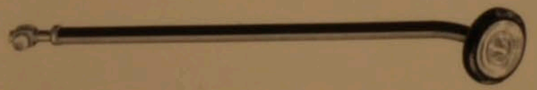
Code

Ham—No. 106. Varicocele Electrode, adjustable to any position, Block Tin, insulated $2.00



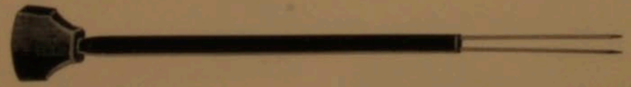
Code

Hammock—No. 180. Varicocele Electrode, adjustable, Bipolar, Block Tin, insulated $4.00



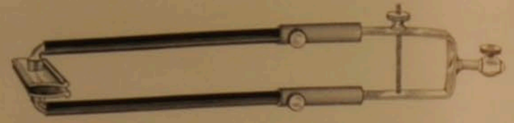
Code

Hinge—No. 145. Electrode for Metallic Electrolysis of the external os, in copper $1.25



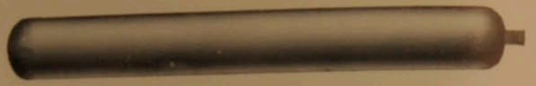
Code

Handbook	—No. 100.	Dunbar Roy Bipolar Nasal Electrode, steel needles	$2.00
Hanker	—No. 231.	Same, platinum needles	3.50
Infer	—No. 263.	Same, Monopolar, steel needles	1.50
Infest	—No. 264.	Same, Monopolar, platinum needles	3.00



Code

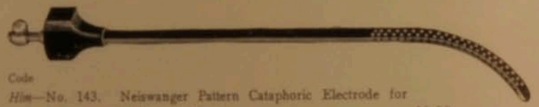
Hyp—No. 196. Varicocele Electrode, adjustable, Neiswanger pattern, Block Tin $1.25



Code

Inkume—No. 272. Carbon Cylinder Electrode . . . . $ .75

A very useful non-corrosive electrode, recommended by dermatologists for facial massage and bleaching.

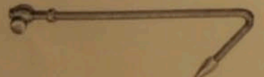


Code

Him—No. 143. Neiswanger Pattern Cataphoric Electrode for treatment of the Prostatic Urethra $1.00

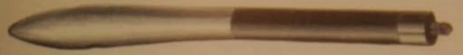
Hill—No. 144. Same, with stem perforated full length 1.25

The stem is fitted with an applicator of twisted wire, which is wound with absorbent cotton to be saturated with any medicament desired.



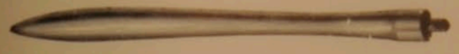
Code

Hull—No. 170. Metallic Points for Muscular Faradization, gold-plated, per pair $1.00



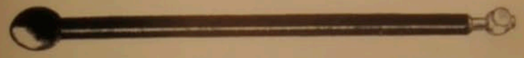
Code

Flange	—No. 59.	Rectal Electrode, partly insulated	$1.00
Ideal	—No. 232.	Same, Copper, " "	1.25



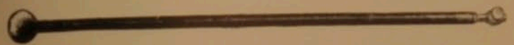
Code

Flap	—No. 60.	Rectal Electrode, all metal	$ .60
Hunch	—No. 178.	" " copper	.75
Idol	—No. 237.	" " all metal, small	.50
Iliac	—No. 238.	" " copper, "	.60



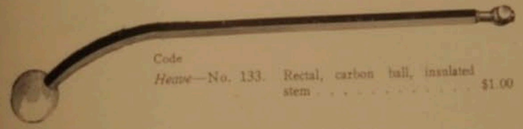
Code

Flare—No. 62. Rectal, with Olive, insulated stem, straight or curved . . . $1.00



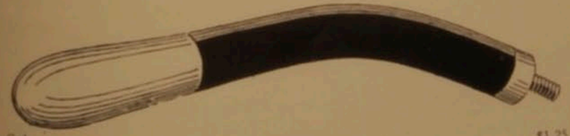
Code

Flash	—No. 63.	Rectal or Vaginal with ball, insulated stem, straight or curved	$ .75
Ides	—No. 233.	Same, copper ball	.75
Idiom	—No. 234.	Same, iron ball	.75



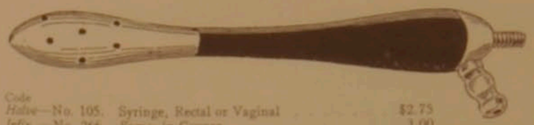
Code

Heave—No. 133. Rectal, carbon ball, insulated stem $1.00



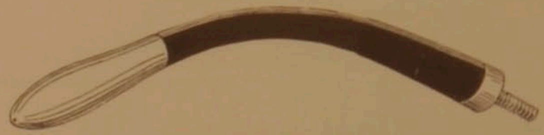
Code

Hand	—No. 108.	Vaginal Electrode, curved, partly insulated	$1.25
Incog	—No. 253.	Same, copper	1.50



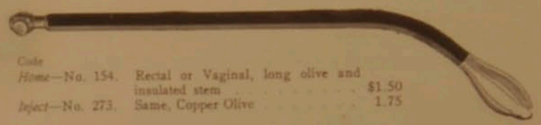
Code

Halve	—No. 105.	Syringe, Rectal or Vaginal	$2.75
Infix	—No. 266.	Same, in Copper	3.00



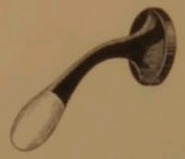
Code

Hamper	—No. 107.	Rectal Electrode, curved, partly insulated	$1.25
Insane	—No. 275.	Same, copper	1.50



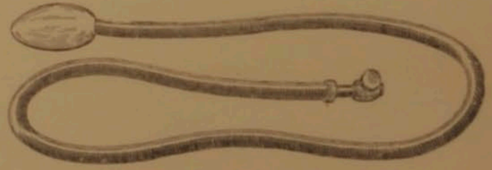
Code

Home	—No. 154.	Rectal or Vaginal, long olive and insulated stem	$1.50
Inject	—No. 273.	Same, Copper Olive	1.75



Code

Harbor	—No. 111.	Rectal Electrode, short, insulated stem and shield	$1.25
Harden	—No. 177.	Same, in Copper	1.50



Code

Holt—No. 153. Esophageal, 24 ins. long, spiral flexible, covered with pure soft rubber. Four metal olives are supplied ⅜ ins., ½ ins., ⅝ ins., ¾ ins., set $2.50

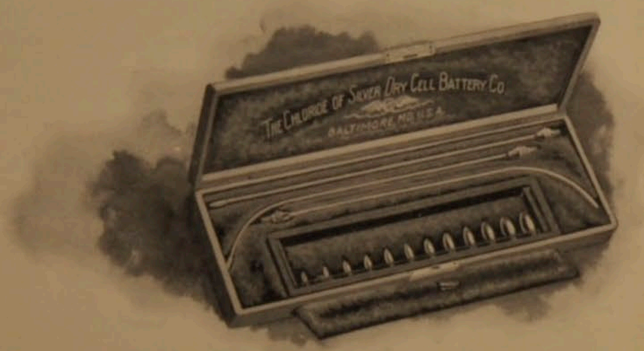
ELECTRODES IN CASES

For the greater convenience of specialists and others desiring a complete set of electrodes for any particular class of work, we have prepared a number of outfits, according to the nature of the work to be performed, which are arranged in most compact and attractive form, in finely finished handsome plush cases.

The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

NEEDLE CASES.

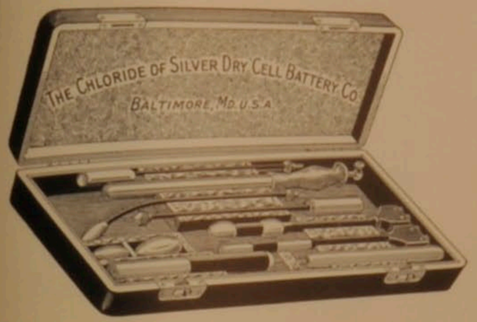
Code		
Knee	—No. 327. Three Gold Plated Needles and No. 70 Holder for one needle	$2.00
Kneel	—No. 328. Three Gold Plated Needles and No. 70 Holder for two needles	2.15
Knew	—No. 329. Three Gold Plated Needles and No. 70 Holder for three needles	2.25
Knife	—No. 330. Six Gold Plated Needles and No. 70 Holder for four needles	3.75
Knit	—No. 331. Six Gold Plated Needles and No. 70 Holder for five needles	3.90
Knob	—No. 332. Six Gold Plated Needles and No. 70 Holder for six needles	4.00
Foyson	—No. 69. Gold Plated Needles for Electrolysis, insulated with hard rubber, each	.45


The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

GENITO URINARY ELECTRODE CASE.

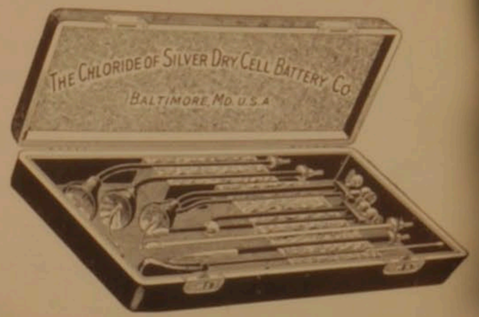
Knead—No. 326. Genito Urinary Electrode Set $3.50

The case contains one nickel-plated Metallic Sound, one each flexible and inflexible Urethral Electrodes, and one dozen assorted Olives on holding stem, sizes 10 to 32 French Scale.


The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

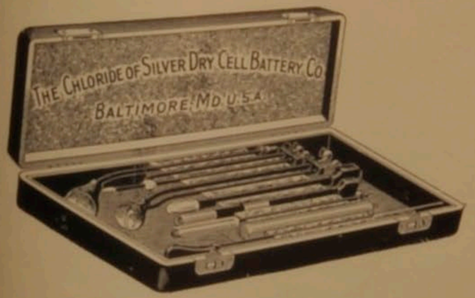
Case No. 301—VAGINAL.

Code
Kale—Case No. 301 contains Electrodes Nos. 49, 51, 52, 72, 73 with three olives, 74 and 183 . . . . $13.00


The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

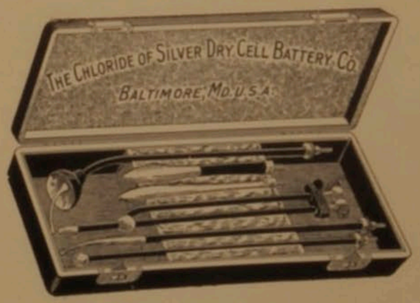
Case No. 302—INTRA UTERINE.

Code
Keck—Case No. 302 contains Electrodes Nos. 43, 53, 54, 55, 57, 58 and 75 . . . . $12.00


The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

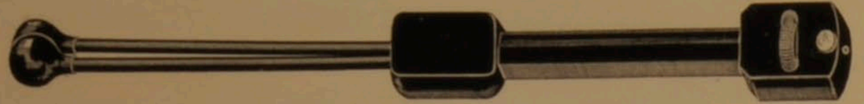
Case No. 303—INTRA UTERINE AND VAGINAL.

Code
Keel—Case No. 303 contains Electrodes Nos. 50, 52, 53, 55, 57, 58 and 90 . . . . $14.75

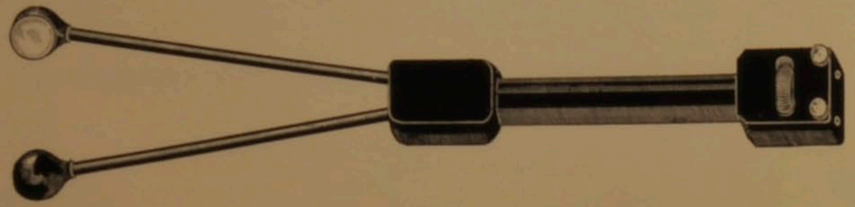

The Chloride of Silver Dry Cell Battery Co.
Baltimore, Md. U.S.A.

Case No. 304—INTRA UTERINE AND RECTAL.

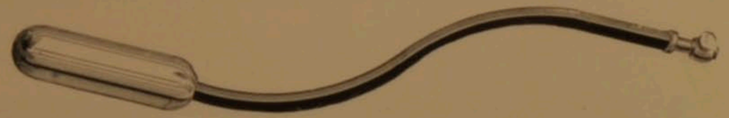
Code
Keep—Case No. 304 contains Electrodes Nos. 43, 54, 57, 59, 60 and 63 . $8.50



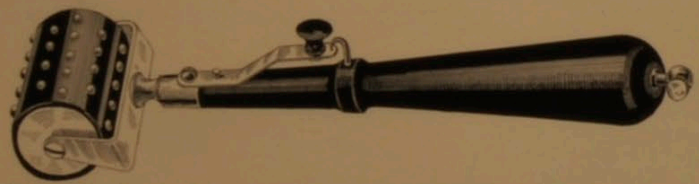
Code
Habit—No. 94. Monopolar Ovarian Electrode with Block Tin Cups, insulated, adjustable to any size $6.00



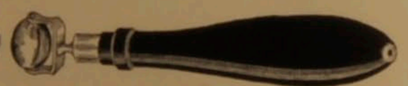
Code
Hack—No. 95. Bipolar Ovarian Electrode with Block Tin Cups, insulated, adjustable to any size $9.00



Code
Hero—No. 140. Spiral Vaginal Electrode, cylindrical head, insulated stem $2.00
Indian—No. 257. Same, in Copper 2.25

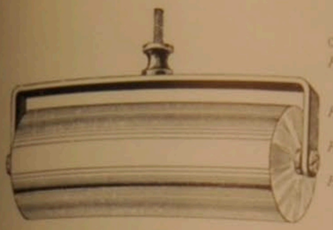


Code
Floss—No. 27. Rolling Rheophore or Wheel Electrode, with insulated metal points and No. 130 Universal Handle $2.25
Flower—No. 262. Without Handle 1.50

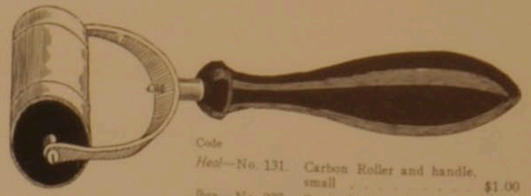


Code
Hood—No. 157. Small Oval Roller for Facial Massage $1.00

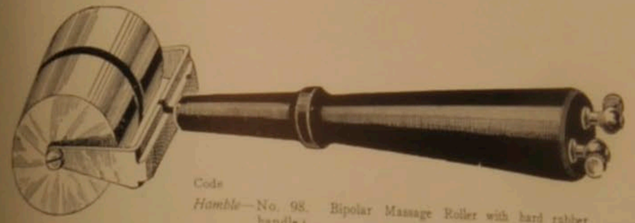
For Massage Rollers, see also next page.



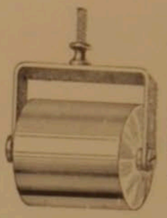
Code
Haddock—No. 97. Massage Roller, nickel-plated with No. 129 handle $2.00
Halyard—No. 198. Same, without handle 1.50
Hyson—No. 199. Same, Carbon Roller with handle 2.00
Hyssop—No. 226. Carbon Roller without handle . . 1.50



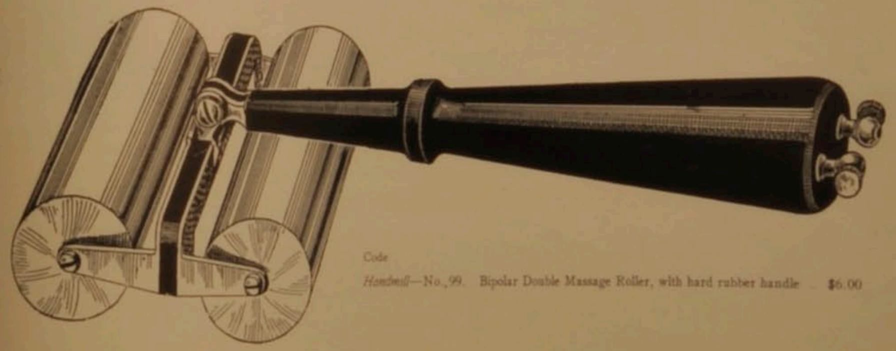
Code
Heal—No. 131. Carbon Roller and handle, small $1.00
Ibex—No. 227. Same, Metal Roller . . . 1.00



Code
Hamble—No. 98. Bipolar Massage Roller with hard rubber handle $3.50

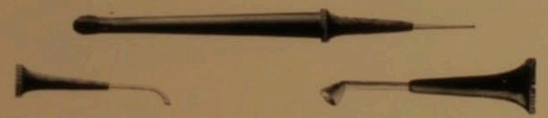


Code
Hackney—No. 96. Massage Roller, short, nickel-plated with No. 129 handle $1.50
Hadder—No. 228. Same, without handle 1.00
Icing—No. 229. Same, with Carbon Roller 1.50
Icy—No. 230. Carbon Roller, without handle 1.00

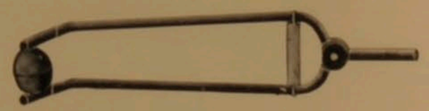


Code
Handbell—No. 99. Bipolar Double Massage Roller, with hard rubber handle . $6.00

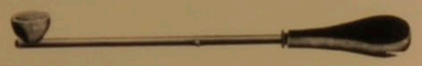
ELECTRODES FOR DENTAL CATAPHORESIS



Code		
Flight—No. 208	Applicator Handle, with straight and curved platinum applicators	$5.00
Fond —No. 201.	Applicator Handle, only	1.00
Flint —No. 202.	Platinum Applicator, straight point	2.00
Float —No. 203.	Platinum Applicator, curved point	2.00
Foam —No. 204.	Platinum Applicator, tubular end	2.50

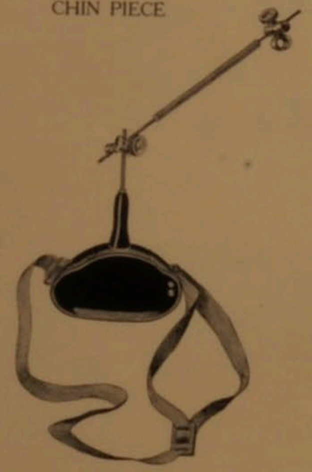


Code		
Fountain—No. 205.	Double Cup Electrode, with soft rubber cups	$3.00



Code		
Fruit—No. 206.	Single Cup Electrode, with soft rubber cup	$1.50

CHIN PIECE

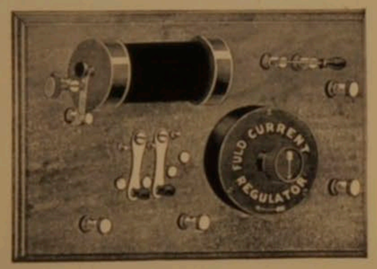


This attachment was made to meet the demand of the profession for some better method of adjusting Applicators, and to insure a perfect contact at all times after the Applicator is in place.

With hard rubber cup, two compound joints and flexible spring for adjusting the Applicator to any position in the mouth.

Code		
Fuse—No. 207.	Chin Piece	$3.50

BATH CABINET PLATE



This instrument is intended to be used with suitable electrodes in a bathtub. The coil is very powerful, and, with two ordinary cells in circuit, the current is carried to the electrodes and then through the entire body.

The coil is wound especially for the work, a primary and two secondaries, which in combination give a very smooth, strong current.

The Regulator is an excellent means of administering the current without the slightest shock.

Complete with two standard cells, long conducting cords and large nickel-plated electrodes for the tub.

Code	
Yerk—Price	$15.00

HEADLAMPS

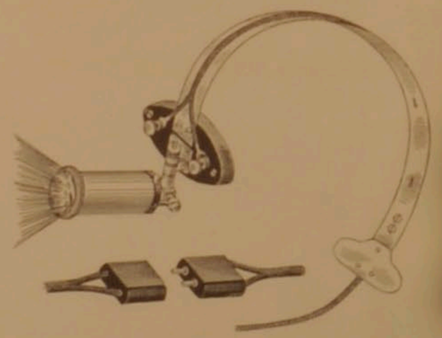
The No. 400 is superior to any similar Headlamp ever before shown. It is fitted with a special B. & L. magnifying lens, which enlarges the area of white light reflected, giving a clean, unobstructed illumination entirely free from shadow.

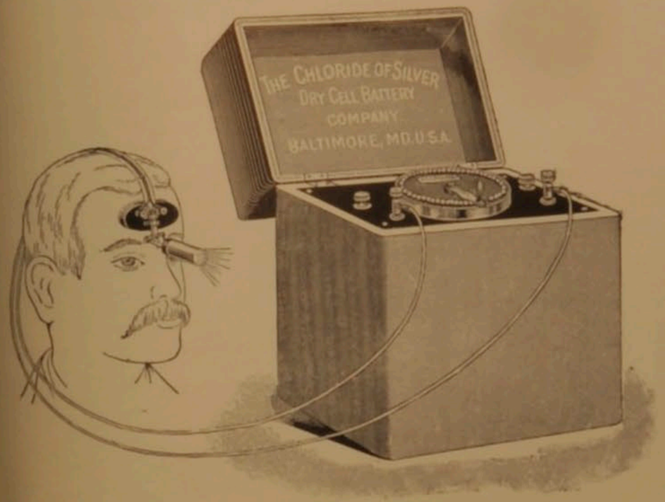
By a unique system of joints, affording movement in any direction, the lens can be easily adjusted for any view, and the focus can be varied by simply sliding the barrel.

A special 4 or 6 volt tipless lamp, with miniature base, is supplied.

It can be operated with Dry or Wet Cells, or in connection with a Current Adapter and Volt Regulator, on the 110 volt direct or alternating circuit.

Code		Price
Hoe	—Headlamp and Cords	$10.00
Hock	—Lamps, each	.50
Hocus	—Lamps, tipless, each	.60





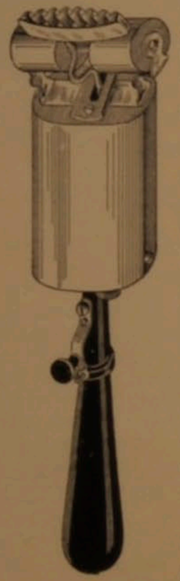
DIAGNOSTIC LAMP BATTERY WITH CURRENT REGULATOR

An excellent apparatus, superbly made, durable and lasting. The Regulator permits the operator to use only sufficient current to light the lamp, thereby saving the life of the cells, which are of the ordinary dry pattern. (Not Chloride of Silver.) Complete with silk conducting cords.

Code		Price
Hoarse	— 6-Cell Battery and Headlamp	$20.00
Hobble	—12-Cell Battery and Headlamp	25.00
Hobit	— 6-Cell Battery only	10.00
Hod	—12-Cell Battery only	15.00
Hoe	—Headlamp only	10.00
Hog	—Current Regulator for 6 Cells (mounted)	6.00
Hoist	—Current Regulator for 12 Cells (mounted)	8.00
Hold	—Extra Cells, each	.50

THE FARADO-MASSEUR.

A combination of facial massage and faradic current. The corrugated lever being set in rapid motion by means of any battery, rejuvenates and restores the nerve centers, and this treatment is rendered doubly efficacious by reason of the assistance of a mild faradic current, which is well known to be incomparable for the purpose of stimulating and building up sluggish tissues. The instrument produces an agreeable sensation, and the excellent results following its use will be apparent from the beginning. A delicate adjustment in the rear regulates the vibrating lever from the gentlest motion up to a strong sharp blow.



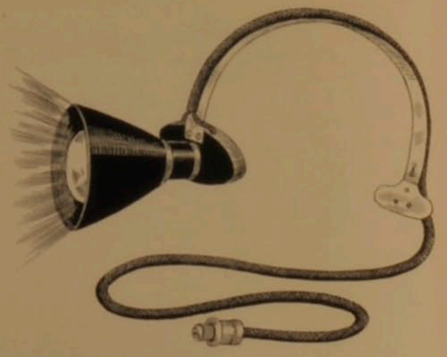
A New and Invaluable Instrument for both Physician and Layman.

Code		Price
Yelp	—Complete with Cords and 2 Standard Cells	$10.00

HEADLAMP.

The No. 401 is a plain Headlamp to be operated on the street current, and can be quickly attached to any lamp socket.

It is without the compound joint movement on the No. 400 and has no magnifying lens. It can be used on either the 110 volt direct or alternating circuit.

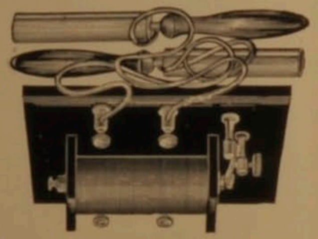


Code		Price
Yest	—Complete with Cords and Plugs	$4.00
Yew	—Extra Lamps, each	.60

MOUNTED FARADIC COIL.

The mounted induction coil is operated by one or more of our Cell Cases or ordinary dry batteries, and is used as the ordinary faradic battery.

We make these in various sizes, depending entirely on the windings, each coil corresponding with the faradic battery of like number listed in the preceding pages.



PRICES.

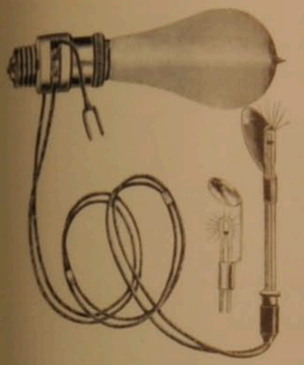
Code	Style	Price
Yoke	—No. 6	$3.00
Yolk	—No. 9	5.00
Yore	—No. 8	7.50

Price includes a pair each of good cords, metal handles and insulated handles.

ERRATUM

Page 54—Mounted Faradic Coil.
Cut inverted.

ASEPTIC SURGICAL AND DENTAL LAMPS



The illustration shows our new Aseptic Lamp for surgical or dental work; it is made entirely of glass, so that perfect sterilization can be assured. The lamp is made for the special purpose, gives a brilliant light of three candle power, and is furnished with either a tongue depressor or mirror which slides over the lamp and can be set to any position to suit the convenience of the operator.

An excellent feature of this lamp is that it can be used on any street current, from 100 to 120 volts, either alternating or direct, with the attachment plug, in which case a 16 c. p. lamp is placed in the socket. Or, if used on the 52 to 60 v. circuit an 8 c. p. lamp must be used.

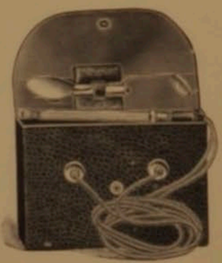
Attachment plugs are furnished to suit either Edison, Westinghouse or Thomson-Houston receptacles.

Where the street current is not easily obtained, or if the lamp is to be portable, the dry battery outfit is preferred.

The Dry Battery Outfit consists of four cells of the ordinary standard size with a current capacity of 12 amperes per cell, which insures good service without frequent renewals.

PRICES

Code		
Yam	—Surgeon's Lamp with Tongue Depressor, cords and attachment plug	$ 5.00
Yard	—Dentist's Lamp with Mirror, cords and attachment plug	5.00
Yarn	—Surgeon's or Dentist's Dry Battery Outfit with cords and attachment plug	9.00
Yaw	—Surgeon's or Dentist's Dry Battery Outfit without cords and attachment plug	8.00
Yawl	—Surgeon's or Dentist's Storage Battery Outfit without cords and attachment plug	14.00
Yawn	—Surgeon's or Dentist's Lamps only	1.50
Yerk	—Tongue Depressor, extra, each	.50
Yest	—Mirror, extra	1.00
Yean	—Silk Cords, per set	1.00
Year	—Attachment Plugs, each	1.00
Yell	—Dry Cells, each	.50

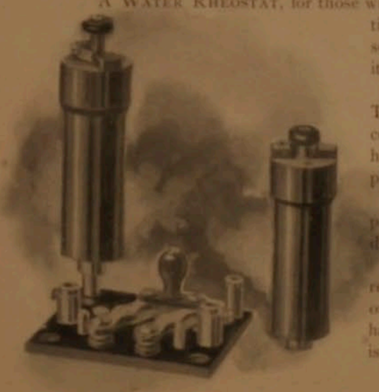


Constant Current Galvanic Battery
No 1

This Battery consists of a number of Chloride of Silver Galvanic Interchangeable Dry Cells attached to a cell-supporting plate, arranged in series, as shown on page 12. Each of these plates is regularly numbered from 0 to the total number of cells the battery contains, so that any desired number of the cells may be used. It also contains :—

A CURRENT REVERSER. This is a plate of hard rubber, secured within the box lid, having two metal posts with conical sockets to reverse the free ends of the electrode conducting cords. It is provided with two short selecting cords for connecting it with the cells, and a switch for closing and opening the circuit, as well as for changing the polarity.

A WATER RHEOSTAT, for those who wish a cheaper rheostat than the Willms Current Controller. This is made in the most substantial manner, of hard rubber, with removable screw cap to permit easy filling. It has at the bottom a socket for connecting with either of the posts of Current Reverser, and a small socket in the top of its piston to receive the electrode cord.



A strong and durable tray fitting within the box top is intended for holding cords and electrodes. The following accessories accompany each battery, and are included in the price Pair silk covered conducting cords, pair best quality sponge electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for removing cells, screw driver for use when removing selecting cords, and nickel plated plugs for testing cells.

The Battery Case is made of mahogany of finest cabinet finish. All metal parts are nickel plated in our establishment by our own process, insuring the highest attainable polish and greatest durability.

In every detail this instrument is made in the very best manner, and possesses every quality required in a first-class battery. Based on the average resistance offered by the human body in ordinary work, generally conceded to be three thousand ohms or more, all our galvanic batteries have a capacity of over seven hundred actual working hours. When the battery is not in use there is absolutely no waste of the elements.

Constant Current Galvanic Battery
No 1

PRICE LIST.

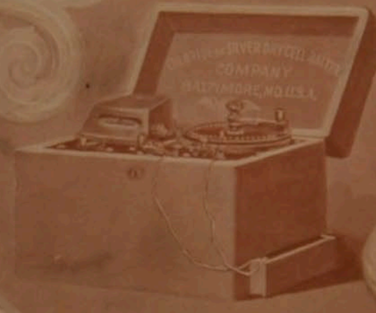
Code.	Compactness.	Portability.	Net Price.
Cake .	24-cell, 10½x 5¾x7¾ in. .	8 lbs. .	$27.00
Calk .	32-cell, 10½x 5¾x7¾ in. .	8¾ lbs. .	35.00
Call .	50-cell, 11½x 6½x7¾ in. .	12 lbs. .	50.00
Caller .	60-cell, 13 x 6¾x7⅛ in. .	14 lbs. .	60.00
Calm .	84-cell, 11¼x11¼x7½ in. .	19½ lbs. .	82.00
Calmy .	100-cell, 11¼x11¼x7½ in. .	12½ lbs. .	95.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30

CHLORIDE OF SILVER DRY CELL BATTERY Co.
BALTIMORE, MD. U.S.A.

CATALOGUE No. 8

MEDICAL BATTERIES

1898


COMPANY
BALTIMORE, MD. U.S.A.

CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE CITY, MD. U.S.A.

Chloride of Silver Dry Cell Battery Company Baltimore, Md.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

MANES E. FULD,
GENERAL MANAGER.

FRANK B. CAHN,
COUNSEL.

Chloride of Silver Dry Cell Batteries.

PATENTS GRANTED THIS COMPANY IN THE U.S. OF AMERICA.

PATENT Nº 336,688, FEB. 23, 1886.
PATENT Nº 374,862, DEC. 13, 1887.
PATENT Nº 374,863, DEC. 13, 1887.
PATENT Nº 403,029, MAY 7, 1889.
PATENT Nº 403,451, MAY 14, 1889.
PATENT Nº 405,196, JUNE 11, 1889.
PATENT Nº 408,157, JULY 30, 1889.
PATENT Nº 414,626, NOV. 5, 1889.
PATENT Nº 414,627, NOV. 5, 1889.
PATENT Nº 421,801, FEB. 18, 1890.
PATENT Nº 437,469, SEPT. 30, 1890.
PATENT Nº 450,840, APRIL 21, 1891.
PATENT Nº 467,338, JAN. 19, 1892.
PATENT Nº 475,528, MAY 24, 1892.
PATENT Nº 475,529, MAY 24, 1892.
PATENT Nº 479,541, JULY 26, 1892.
PATENT Nº 488,299, DEC. 20, 1892.
PATENT Nº 541,136, JUNE 18, 1895.
PATENT Nº 554,759, FEB. 18, 1896.
PATENT Nº 554,760, FEB. 18, 1896.
PATENT Nº 554,761, FEB. 18, 1896.

PATENTS GRANTED THIS COMPANY IN GREAT BRITAIN.

PATENT Nº 11,842, JUNE 18, 1895.
PATENT Nº 1,238, JAN. 17, 1896.
OTHER PATENTS PENDING.

CABLE ADDRESS:
"CHLORIDE BALTIMORE"

DESIGNED AND ILLUSTRATED BY
JOHN F. SCHULZ
BALTIMORE

THE CHLORIDE OF SILVER INTERCHANGEABLE DRY CELL BATTERIES.

From a therapeutical standpoint, the medical battery has long ceased to be an experiment, but has become an actual necessity. Its importance is such that it now constitutes a part of medical education, and is destined to exert a broad influence upon the health and happiness of society. Its progress has been phenomenal.

A house like ours, which has led in the development of the medical battery industry, retains its position of proud supremacy because it has sought, above all things else, to educate the profession, and the public as well, up to the highest pitch of expectancy and to prove to them that our instruments, by reason of their perfect workmanship, construction, design, method, material, cleanliness, compactness, portability, durability, and **efficiency,** fill the requirements of all Electro-Therapeutists.

The apparatus and appliances illustrated herein can in no wise disappoint the hopes that are based upon the work and successes of the past ten years. We have lived up to our record of originality. Our mistakes have been few, were quickly overcome, and only existed long enough to point the road to further improvement. Mere novelty is not improvement, but with our instruments what has been achieved is the gradual and steady evolution of all the various parts, until to-day each aids to form a perfect whole, to which each year's experience and study have contributed. Between a declining reputation and a growing one there is a vast difference. While the former has unhealthy conditions and the elements of decay wasting its support, the latter has for its foundation the rock of progress. All successful enterprises show evidences of original methods, new ideas, and a disposition on the part of their projectors to meet the conditions of the times. During the first year under our new régime and management, just completed—which, by the way, has been a brilliant one in the history of our establishment—our every effort has been to learn the weaknesses of previous direction and correct them, so as to bring our already unrivalled instruments to the highest possible standard of excellence. Many improvements (for which patents are pending) are now embodied in all our latest models. No other batteries have ever been put before the medical and dental professions, or the public in general, possessed of so many sterling features and deserving of such high favor. The old hackneyed phrase, "Just as good as" Chloride of Silver Dry Cell Batteries has helped to introduce many an apparatus seeking public favor; yet none have succeeded thus far in establishing any just right to this claim.

The manufacturers of the old style wet batteries, unmindful of prevailing conditions and ignoring popular demands, still cling to their antiquated ideas and traditional mistakes, and day by day see their business drifting away and the long cherished glory departing.

Dissatisfied with their own failing lot, some of these, more unscrupulous, perhaps, than others, attempt to smirch the good name and record of their enterprising competitors, unmindful of the fact that true worth will outlive the most bitter and caustic antagonism. In the battle for supremacy the Chloride of Silver Dry Cell Battery has reached the front. We believe in progression. What was accepted as a standard years ago is now only mediocrity. Old usages and traditions must give way to modern progress.

In the early history of our business some complaints were heard. Even then our instruments were considered so superior to others and proved so extremely handy that our competitors failed to administer their downfall. Step by step all difficulties were sought after, each in its turn being quickly and permanently remedied. After careful study and diligent labor our chemical and mechanical experts have brought the **Chloride of Silver Dry Cell** to as near perfection as human brains and hands can make it. Its chemistry is fixed, and in its newly perfected shell, whereby an old difficulty is removed, it is truly "The Little Wonder" in the field of electricity.

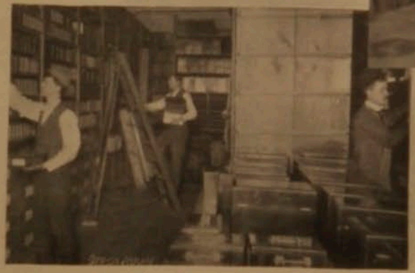
Our methods are not those by which cheaper batteries can be made; they are part of our system by which uniform quality is guaranteed to all apparatus of our make. The mechanical accuracy, expert workmanship and electrical skill evidenced by our products are proverbial, and the result is that the Chloride of Silver Dry Cell Batteries last longer and give greater satisfaction than any other medical battery ever produced. Every effort, whether in the mechanical, designing or finishing departments, is directed towards **accuracy, efficiency and durability.** Such methods are bound to conquer. From these the **Chloride of Silver Dry Cell Batteries** of to-day have been evolved. Beyond contradiction they now stand alone and unequaled.

THE STANDARD OF THE WORLD

DISTINGUISHING FEATURES

Design

The **Chloride of Silver Dry Cell Batteries** possess refinements of detail and construction that have thus far been attained only by us. None others can be compared with them. Their design is as positive and unique as the effect produced, or as are the materials that enter into their construction. Each little part is carefully studied. Firstly, its mission, then design, then its mechanical construction, and lastly the finish. The secret of the success of our instruments lies in the great care taken to bring all their many parts and features into harmonious relation, presenting an imposing and pleasing appearance, without detracting in the slightest from their efficiency. Therefore, not alone can it be regarded from the standpoint of its personal composition as a perfect, well rounded, thoroughly adjusted apparatus, but in its minutest details it may be scrutinously examined with the certainty of showing superior construction in every part.



Materials

The best batteries can be manufactured by using only superior materials. Realizing this, all materials we use are ordered to exact specifications as to physical quality and neatness of finish, regardless of cost; we must have only the best. The greater expense incident to such construction is justified by the advantage that it enables us to offer not only a handsomer apparatus, perfect in design and finish, but the positive knowledge that the effect desired, whether in Galvanism or Faradization, will surely be forthcoming with the movement of each switch.

Wood Work

As we strive to present a pleasing view to the eye, we begin with the case. This department is under the supervision of one of the most experienced cabinet makers the world affords, with a knowledge replete in the selection of wood, its proper treatment and manipulation, that has been gained only by years of careful training, diligent pursuit and study. His instructions are to purchase only the best the market affords—never to mind the cost. The result is, our mahogany is selected from the richest and most beautiful that can be procured. Look at the finish of the cases; look at their artistic design; try and find a single thing that can be added to or taken from them to make them better. Observe particularly the richness of tint, the grain of the wood and the lustre of the finish. They are marvels of beauty, daintiness and durability, completely and modestly artistic in every line.

NICKEL PLATING AND POLISHING

Probably nothing so brightens and embellishes our various appliances, making them attractive, as much as the nickel plating and polishing. Truly the principal requisites for insuring a beautiful appearance are accomplished in these two departments. There are many grades of such work, and to bring about the best results requires most careful, patient labor. The process of nickel plating used in our establishment is distinctly our own, and not only enhances the general appearance of our instruments, but improves their quality and increases durability.

In the polishing room equal care is observed. Here are to be found the swiftly revolving wheels, buffs and brushes over which are brought the different parts of metal and hard rubber to receive, as it were, their coat of polish. The greatest skill is necessary to perform this arduous task and to give to the goods that mirror-like finish that makes them objects of admiration at first sight, even before the observer has had opportunity to become acquainted with their many other sterling features.

TEST DEPARTMENT

To this room are brought all the many batteries, electrodes and other instruments to be finally adjusted and accurately tested before shipment. During the process of construction the different parts may be far apart, passing through many hands, yet they finally meet here to play their distinct part in the complete apparatus. With perfect system each little piece is critically examined by trained hands. Should there be the slightest doubt as to its performing the work it is intended for, it is cast aside as imperfect. Here each cell is tested and each wire carefully traced in its proper course; all connections must be absolute; every switch must quickly respond to its purpose. The rheostats and controllers, rheotomes and current reversers pass under the eyes and through the hands of men familiar with the purposes they must answer. Each meter is adjusted to perfect accuracy in accord with standard instruments. Then when all these parts are assembled they are passed to an expert for final adjustment as a finished battery; he in turn delivers it to a second expert to be approved and to receive the certificate that must accompany it.

After such precision and care it is practically impossible for an instrument to leave our establishment in any but perfect condition. With pride we assert that it is a most extraordinary thing for any complaint to reach us.

CLEANLINESS

No liquids or acids being used, the cells being practically dry, hermetically sealed and enclosed in close fitting brass tubes, it follows that the batteries must remain clean at all times. Even should the battery be upset, carried upside down, sideways, or in any other position, no leakage is possible.

Compactness and Portability

The size of a Galvanic Cell being 1⅞ by 3¼ inches, the weight 1⅝ ounces, it can readily be seen that fifty of them will occupy a very small space and weigh so little that even our largest batteries are easily portable. Sizes and weights of the various batteries are mentioned on the descriptive pages.

CONVENIENCE AND READINESS OF ACTION

When the batteries leave the factory they are completely ready for use. It is only necessary to open the case, attach conducting cords to the binding posts, and then, by throwing switches in proper position, the current can be immediately applied. They are always ready for action.

ECONOMY AND EASE OF RENEWAL

The silver elements in our cells being valuable, exhausted cells are accepted by us in exchange for new ones at about two-thirds the price of new cells. Thus, as each Galvanic Cell has a life of seven hundred actual working hours when the average resistance of the human body is interposed, and exhausted cells can be exchanged for new ones for 30 cents each, it will be seen that the cost of maintaining our batteries is very slight.

The Faradic Cell Cases when exhausted can be renewed (new cells inserted) for 75 cents each. Therefore, as each cell case has a life of one hundred working hours, the cost of maintaining a faradic battery is only ¾ of one cent per cell case for each hour the battery is actually used.

The easy manner of attaching and detaching cells is fully described on another page treating of the Chloride of Silver Cells.

CONSTANCY AND UNIFORMITY OF CURRENT

The Chloride of Silver Dry Cell as made by us is positively free from local or chemical action when not in use, and for all practical purposes is a standard. Free from polarization, local and chemical action, it follows that not only is the current perfectly constant, but that its life is measured only by the actual demand upon it. An ideal battery should maintain a constant electro-motive force throughout the whole time of its action. **No other cell can substantiate such a claim.**

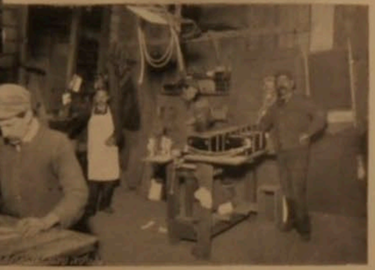
Durability

Using only the highest grade materials and employing the most skillful workmen in the production of our goods, all parts of the apparatus being made in the most substantial manner, reducing to a minimum the liability of the parts to wear, and there being absolutely no exhaustion of the cells when not in actual use, it stands to reason that our batteries are as durable as it is possible to make such apparatus. The cells are guaranteed to have a certain life, and can always be renewed at slight cost, but there is no limit to the time our batteries will last. Some of the first batteries we put on the market, over ten years ago, are still in splendid working condition.

GUARANTEE

Our claim for the Chloride of Silver Dry Cell Battery is that it is as near perfection as it is possible to make it. We use the utmost care in the selection and purchase of materials, employ only the most skillful workmen, many of whom have spent a lifetime in this one line of business, and exert our entire efforts to give the profession superior instruments by the use of which can be obtained the best possible results. We could make cheaper batteries, but only by sacrificing quality. All our instruments are guaranteed to be practically perfect in every mechanical detail. The cells are guaranteed to be constant, free from waste when not in use, clean and always ready for action. The Willms Current Controller is guaranteed to be the only rheostat that will permit the administration of the mild electric current gradually, in minute dosage and without any shock whatever to the most sensitive patient. A guarantee that it will perform the work that it is intended for goes with each instrument.

Before purchasing a battery, be sure to examine ours. Most likely your dealer has them; if not, he will get them for you. Or write to us. Don't mind "bothering" us.

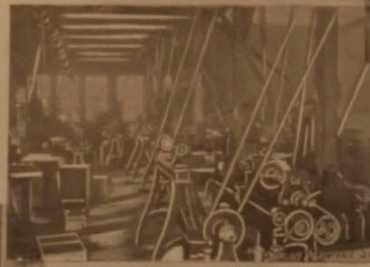


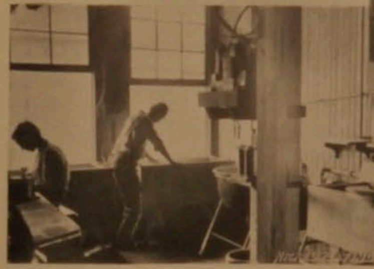
We employ several correspondents who gladly answer all questions propounded. That's a part of our business, and we like it. Our greatest ambition is to convince everybody of the superiority of our manufacture.

BUFFING AND POLISHING

PRICES

A good thing is worth its price. That which looks like economy is often the greatest extravagance. It stands to reason that if you purchase low priced goods, you will not get the most desirable quality. In the selection of a battery any one who permits the lowest price to influence his decision will eventually be convinced of his penny wisdom and pound folly. You cannot afford to make a mistake in your selection. The most essential thing is to procure an apparatus that is dependable—the one that will surely give the best results. To say **The Chloride of Silver Dry Cell Battery** has no equal is a bold statement, but we are ready to stand by it. While other batteries are offered at much lower figures, they are of correspondingly lower value. Our prices are as low as is consistent with the high grade of the goods. They will be found very reasonable, provided *quality, efficiency, durability, and cost of maintenance* are taken into careful consideration.





Our unequaled facilities and advanced methods of construction enable us to furnish electro-medical apparatus that is superior to any made. Our cheaper priced batteries are as honestly constructed as those commanding higher figures, the difference being entirely in the size and style of the instruments. An examination of the goods will convince anyone that they possess more desirable features and more points of excellence than could possibly be contained in such brief descriptions as are to be found in the succeeding pages.

Advice to Patrons

All previous lists are superseded by this. Avoid ordering goods "same as last," but always mention catalogue number.

Every battery and electrical appliance sold by this company is carefully tested before shipment. Great care is used in filling orders promptly, packing goods properly, and obtaining receipts from carriers for delivery in good condition. However, we assume no responsibility for loss or damage of any kind after goods have been delivered to proper transportation company.

If there is any preference for a certain route of shipment, it should be mentioned on the order.

Forwarding charges must be prepaid on all goods sent to us for renewal or repair, and to avoid trouble the name and address of the sender must be plainly marked on packages.

TERMS

The prices named in this catalogue are strictly net according to the lists; no discount or rebate will be allowed. Bearing in mind that we take back exhausted galvanic cells at two-thirds their original price in exchange for new cells; that the price of 50 new galvanic cells is $45, for instance, and when they are completely exhausted, we allow $30 for the old cells in exchange for new ones, it will readily be seen that we cannot afford to allow discounts from our listed prices.

Money should always be enclosed with orders. However, if the purchaser prefers, we will ship goods by express C. O. D. upon receipt of remittance covering the cost of transportation both ways. The best ways to remit are by Bank Draft, Postal Money Order, Express, or Registered Mail. All goods are sold F. O. B. Baltimore. No charge is made for boxing, packing or hauling.

CHLORIDE OF SILVER CELL

The earliest suggestions on the usefulness of Chloride of Silver as a depolarizing agent appear to have been made by Marié Davy in 1860, but it was brought into prominence by the investigations of Warren de la Rue, who, even in the crude state of his cell construction, claimed it to be well adapted for standard elements because of its almost perfect constancy in electro-motive force. For years it remained in obscurity, many difficulties being encountered in manipulating the chemical so as to be easily handled, and further, in procuring for the element the proper electrolyte to excite its full yield of current, and in which it would not suffer by chemical or local action. John A. Barrett labored many years in that direction, and later was materially assisted by Charles Willms. Together, these experts sought each difficulty and gradually overcame most of them.

In the experiments of De la Rue the chloride of silver was employed in shape of a fine powder, which offered immediate objection because of the waste naturally attending its use in that way. This was remedied by casting the melted chemical in various ways and with varied success, until final investigation suggested to cast it in suitable moulds on a silver wire. Later, to improve the conductibility of the element, it was wrapped with fine silver wire. The exciting paste, or electrolyte, was, however, the greatest obstacle to the success of this wonderful discovery, and to improve this, thereby putting aside all doubt as to local action, required years of constant watching and faithful experiment. During the past year our laboratory has grappled with the problem of the electrolyte, appreciating that in this particular feature lay the remainder of all trouble, and after most thorough chemical experimentation we have succeeded in establishing a permanent excitant, fixed in its chemistry, assuring a cell that in every respect **is perfect.**

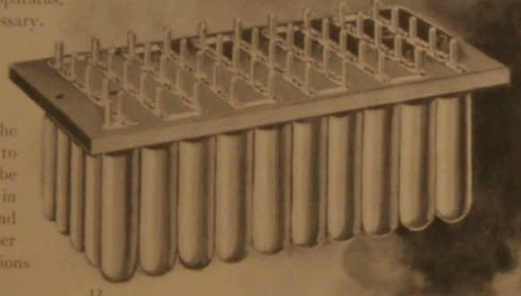
To hermetically seal the elements and electrolyte in the shell created a problem that resisted the best efforts of our laboratory for many years, but the never-say-die enthusiasm overcame all trouble from this source, and a combination of four seals effectually relieved all anxiety of oozing or leakage of any kind whatsoever. It would require a volume of several hundred pages to relate the whole history of this arduous task, but to the experts who were faithful in their search this was a matter of more than ordinary moment. To them it meant fame, and with it their just pay for giving to the world a complete cell, that for all practical purposes is considered a standard.

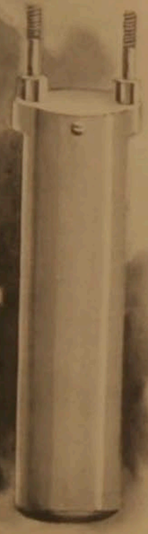
The Chloride of Silver Cell as manufactured by us at present is the proud achievement of these years of labor, and while the difficulties encountered in order to bring it up to its present standard have been severe and numerous, we have not rested till success has crowned our efforts and enabled us to place on the market a cell which the medical profession, as well as electricians and scientists in general, acknowledge to be without an equal for the purposes intended.

GALVANIC CELL

The illustration shows one of our Complete Galvanic Interchangeable Dry Cells, actual size, ready to be attached to cell-supporting plate, and beyond a doubt this is the most compact and convenient cell on the market. It is also the cleanest and most efficient cell ever offered to the profession. For a long time the foremost Electro-Therapeutists have recognized that for medical work it is not desirable to have a cell producing too high a current, as such current is dangerous in certain kinds of work, but what is most desirable is a current of sufficient strength that shall at the same time have the element of constancy. Our Chloride of Silver Cells produce the only current that is perfectly constant. The most eminent Electro-Therapeutists appreciate this fact and realize that the current produced by our cells is the kind most desirable for medical purposes.

The outside dimensions of this cell are 3¼x1⅞ inches. In order to get sufficient pressure, it is frequently necessary to have a large number of cells in a physician's battery, and as most practitioners desire to have a portable apparatus, a compact arrangement of the cells is absolutely necessary. These cells are so small and light that a group of fifty or more, as illustrated, can be arranged in a battery which weighs so little that a child can easily carry it. The first cells we put on the market were not interchangeable, and when exhausted it was necessary to return the whole battery to us for renewal. We soon discovered it to be desirable to have the cells so arranged that they could be readily removed when exhausted and new ones inserted in their place. Our new inventions provide a very simple and convenient construction by which the cells are held in proper position to the supporting plate, and the proper connections

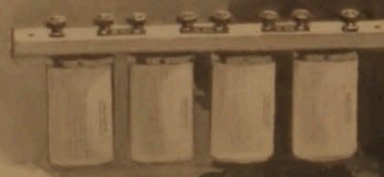


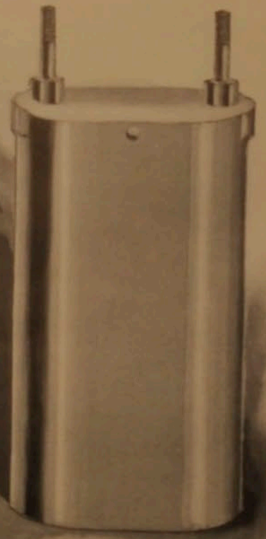


secured, without special skill on the part of the operator. We have arranged to supply surgical instrument dealers and electrical supply houses in various parts of the country with a stock of our goods, so that exhausted cells may be readily replaced by new ones at short notice and without the return of the battery to the factory. Every one of our cells is made by an exact gauge; any one cell will always fit into the place from which another has been removed. Our method of renewing batteries is to give entirely new cells in exchange for exhausted ones, and as the silver elements in exhausted cells have a certain value to us, in making exchanges we charge only one-third the regular price of new cells. Dealers supply them on the same terms.

FARADIC CELL CASES

The illustrations show a single Interchangeable Faradic Cell Case, actual size, also a group of four such cell cases attached to a hard rubber plate for use in our larger faradic batteries. Each cell case contains two cells connected in multiple for current. Some batteries require but one cell case to operate with them, while others, having different coils, require more. The life of these cell cases is to be measured only by the actual work they perform—averaging one hundred hours—and there being no waste when not in use, they are most economical to maintain. As the cell cases, when exhausted, can be renewed for 75c. each, it will be seen that the cost of operating one is only three quarters of a cent per hour. They are all made under our latest patents (some now pending), and are so simply arranged and connected that exhausted ones can easily be removed and new ones quickly inserted, even by persons of little or no experience.





Lord Baltimore Faradic Battery

Nº 7A

Very frequently physicians prescribe faradic batteries for their patients for home use, and the intelligent doctor, being fully aware that those we manufacture are the cheapest, provided quality is taken into consideration, does not hesitate to recommend the purchase of a Chloride of Silver Interchangeable Dry Cell Faradic Battery. When, however, such an order reached our agents, it was found that a $10.00 battery was the cheapest that could be obtained, and many customers, not caring to spend this amount, were compelled to buy an antiquated, troublesome acid or fluid battery. We have constructed an instrument, as shown in cut on opposite page, at a price within the reach of all. It meets all the requirements of a cheap but first-class machine. The case is of mahogany, highly polished, and measures only 7⅞x4⅞x2⅛ inches. It is not only the best made and cheapest faradic battery on the market, but it is also the most economical to maintain. No destructive acid. No corrosive material. Absolutely no local action. It is a comfort at home, and invaluable when traveling. It is so simple that a child can use it.

To start the current it is only necessary to place the cell in an upright position over the two small springs at the front of battery case, see that the buzzer spring is properly adjusted, and the battery will work without further trouble or interference.

Owing to the care with which this battery is made, the currents are perfectly smooth. It will furnish a primary, a secondary, or a combined current, as desired. All three of the currents can be modified to suit the most delicate child, and can be increased to meet the requirements of a robust man. The apparatus is provided with a pair of conducting cords, a pair of handsome nickel plated electrodes, and a pair of ebonized handles.

In this battery we have solved the problem ot making a strictly first-class instrument at a very moderate cost, and we are convinced that, taking into consideration its many excellent qualities, its completeness and its fine finish, it is the cheapest battery on the market to-day.

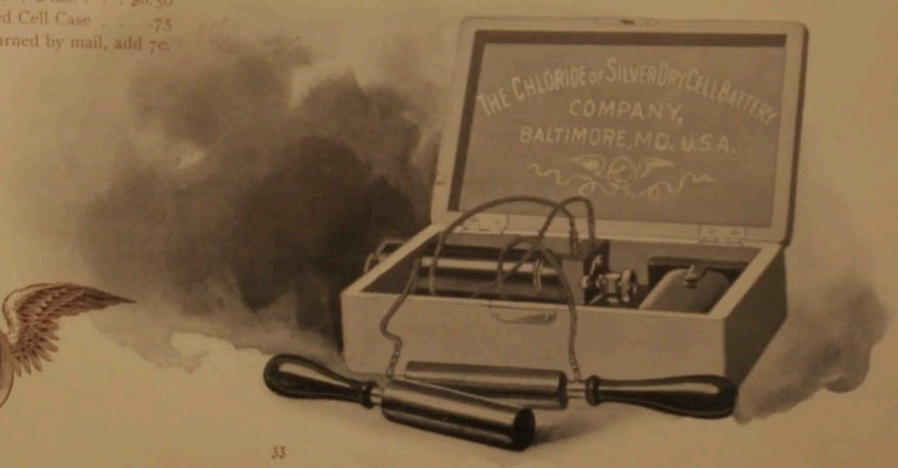
Lord Baltimore Faradic Battery

Nº 7A

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Eager . . .	7⅞x4⅞x2⅛ in. . . .	2 lbs. . . .	$6.50
Renewing and restoring exhausted Cell Case . .			.75

If Cell Case is ordered to be returned by mail, add 7c. postage.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY,
BALTIMORE, MD. U.S.A.

Constant Current Galvanic Battery

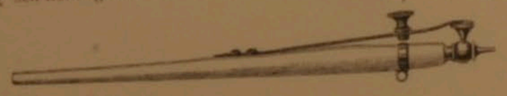
No. 3

This Battery is intended for physicians' and family use in the treatment of cases requiring a small amount of current, and will be found of sufficient strength for work about the head, for the electrolysis of small growths, the removal of superfluous hair, treatment of strictures of the urethra, etc., etc. It consists of a number of Chloride of Silver Galvanic Interchangeable Dry Cells attached to a supporting plate which is covered by a hard rubber plate. The cells are arranged in series, so that any desired number may be used. The case is made of highly polished mahogany. The following accessories are included in the price: Pair conducting cords, pair sponge electrodes, nut wrench for removing cells.

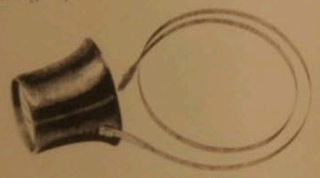
Based on the average resistance offered by the human body in ordinary work, generally conceded to be three thousand ohms or more, the battery has a capacity of over seven hundred working hours. When the battery is not in use there is absolutely no waste of the elements.

THE REMOVAL OF SUPERFLUOUS HAIR BY ELECTROLYSIS.

The apparatus required for the operation consists of a galvanic battery containing from six to twenty-four cells, an electrode needle holder, a very fine needle and two conducting cords. The Chloride of Silver Interchangeable Dry Cell Battery, being more CONSTANT, smaller and more easily portable than any other battery, is employed to great advantage in performing the operation. The needle, carefully inserted into its holder, must be connected with the negative pole, the well moistened sponge electrode connected with the positive pole being grasped in the patient's hand. Carefully introduce the needle alongside the hair into the follicle, then close the circuit-closer of the needle holder for ten to thirty seconds, according to the size of the hair. As soon as a slight frothing is produced or a circle appears around the mouth of the follicle, the circuit should be broken and the needle withdrawn. If the hair does not leave the follicle with the gentlest traction, re-introduce the needle one or more times. A strong self-holding lens is of the greatest assistance when introducing needle directly into follicle.



CHISOLM'S CIRCUIT-CLOSING NEEDLE HOLDER.



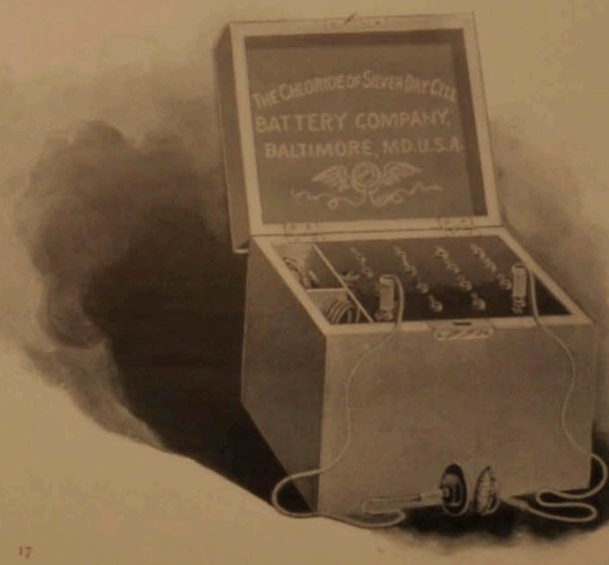
SELF-HOLDING LENS.

Constant Current Galvanic Battery

No. 3

PRICE LIST.

Code.	Compactness.	Portability.	Net Price
Cameo	6-cell, 4⅛x4½x5½ in.	2¼ lbs.	$10.00
Camis	12-cell, 5¼x5½x5½ in.	3½ lbs.	15.00
Camp	16-cell, 6⅝x5⅜x5½ in.	4 lbs.	20.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30
Chisolm's Circuit-closing Needle Holder, with six very fine Electrolytic Needles, for above operation			4.50
Self-Holding Lens			1.50
No. 78. Needle Holder			1.50
No. 83. Steel Needles, per dozen			1.00
No. 84. Iridio-Platinum Needles, each			.40



Willms Current Controller

The name Rheostat was originally given to an instrument devised for the purpose of varying at will the amount of resistance in a circuit. Every physician accustomed to the use of electricity has fully realized that to properly apply the current he must have in the circuit a rheostat of some description.

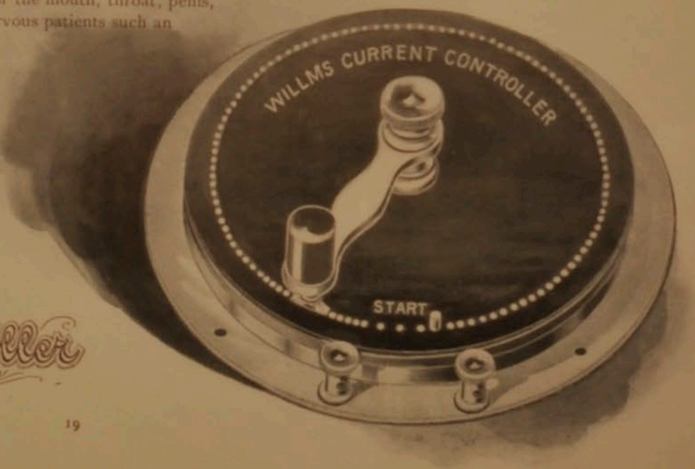
Prior to the invention of our controller there were numerous instruments offered for the purpose of checking the current, each of which, after repeated experiments, for one reason or other, failed to meet the desired requirements. Their most objectionable feature lay in the fact that almost to a unit they employed water in some form as the resistance body.

The Willms Current Controller revolutionized this field all over the world. It sprang into immediate favor because it supplied a long-felt desire on the part of the intelligent practitioner who longed for an instrument that would do away with the disagreeable necessity for moisture. In order to obtain fair results in using a water rheostat it was necessary to fill the rheostat with water for each application, and afterwards to empty it. This was not only troublesome work, but uncleanly, as well as time-taking, and unless it was most carefully done, the metal parts of the battery were liable to be injured, as the slightest moisture would cause them to corrode. Therefore, frequent cleaning and repairing of the battery became necessary, as, even though desiring to be careful, a busy man could not always spare the time to thoroughly dry the rheostat every time he had used it. Another objection was that it was not convenient as a portable apparatus.

In one grand sweep the **Willms Current Controller** overcame all these most serious objections. It is perfectly dry, the resisting body consisting of a graphite coat over a network of wires, these running through a bed or plate of hard rubber to the face of the instrument, there connecting with the controller arm, which works from the center of the plate, moving around the edge in a complete periphery. At the start, after passing the first three pins, which are not contact points, the resistance offered is so great that the current passing is only strong enough to be scarcely perceptible; then, as the shoe of the controller arm glides smoothly over the contact points, the resistance is gradually lessened, until, without the slightest fluctuation, the full strength of the battery is being administered without giving any semblance of a shock even to the most sensitive patient. We boldly claim that no other rheostat ever invented can equal this one in administering the current mildly, evenly, and with such gradual increase. We challenge the world to produce a rheostat that will give so wide a range of resistance in so compact a space, offering as ours does a maximum resistance of over two hundred thousand ohms and a minimum of less than one ohm. To present our readers an idea of what the **Willms Current Controller** accomplishes, it is but necessary to state that the maximum resistance it offers is equal to that of a coil of No. 30 magnet wire measuring more than three hundred and fifty-two miles in length, and all in a space measuring only 6¾ inches in diameter, the entire instrument weighing less than two pounds when mounted on a metal base. Its mechanism is so simple that the most inexperienced person can quickly understand its working, and it cannot be injured when properly used.

A distinctive feature of the **Willms Current Controller** is that the resistance body is beneath the bed of the instrument, contact being secured by pins passing through the hard rubber plate. All other graphite rheostats have the objectionable feature that the controlling device passes immediately over the resistance body, this gradually destroying the resistance, thereby rendering the instrument imperfect, causing the current to be delivered jerkingly and shocking the patient. Many attempts have been made by others to avail themselves of the advantages suggested by the Willms patents, but it seems scarcely necessary to remark that all such have deservingly proved failures.

With such a controller in the circuit, the physician can with perfect safety apply the mild electric current to those portions of the human body, and for classes of work, which with the former faulty rheostats he was properly afraid to approach. Without the slightest danger of imparting a shock the current can be applied to the mucous membrane of the mouth, throat, penis, vagina, rectum, etc., etc. In treating sensitive and very nervous patients such an instrument is invaluable.



Code—Canary.
Size, 6¾x6¾x2½ inches.
Weight, 1½ pounds.
Maximum resistance, 200,000 ohms or more.
Minimum resistance, less than 1 ohm.
Price, $10.00.

Willms Current Controller

Willms Calibrated Current Controller

FARADAMETER

IMPROVED RHEOSTAT.

[*Extract from Bulletin of the Electro-Therapeutical Laboratory of the University of Michigan.*]

Any improvement in electro-therapeutic apparatus looking toward greater refinement and accuracy in determining the results obtained by it is hailed with delight by the progressive physician, provided it is both simple and serviceable. In limiting the number of unknown terms in attempts at the solution of a problem the solution is made more certain and conclusive. Rheostats are not only convenient, but have now become essential to the successful handling of both direct and induced currents, and the dry rheostat has many points of superiority over the liquid form for this purpose. One great objection to both the liquid and dry rheostats, with the exception of those made of wire, which, when of very high resistance, are both bulky and expensive, has been the fact that the amount of resistance which they interposed in the circuit was unknown, and therefore they served no other purpose than to furnish a convenient means for increasing or diminishing the current when a greater or less quantity of such resistance was used. For this purpose they are of much service, and are now quite generally employed in the patient's circuit of both the galvanic battery and the induction coil. Recently, attempts have been made to extend the usefulness of these rheostats when made of material sufficiently constant in resisting capacity. A notable instance of this attempt at improvement is shown in the accompanying cut of the well-known Willms Current Controller, made by the Chloride of Silver Dry Cell Battery Company. At our suggestion they have, at much pains and expense, perfected this rheostat by determining and marking the scale of resistances which it furnishes, in ohms, at each contact of the radial arm in its path around the periphery.

This improvement greatly enlarges the usefulness and increases the satisfaction in using the rheostat, especially in the patient's circuit of the constant or galvanic current, for aside from the service it renders, as formerly, in readily graduating the amount of current given the patient, it can now be utilized for determining the resistance of that part of the patient's body which completes the circuit between the electrodes. In any application of the constant current where this graduated rheostat is in use, if the E. M. F. and current are known, the entire resistance in the circuit can readily be obtained from Ohm's law by dividing the E. M. F. by the current, and if from this entire resistance the amount furnished by the rheostat is subtracted, the remainder will give, approximately, at least, the resistance of the body of the patient between the electrodes. This is a quantity which it is often quite desirable for the operator to know. He can then determine the proportion of energy that is expended upon the tissues treated independently from the entire amount consumed. The graduation is also of much service when the rheostat so graduated is used in the patient's circuit of a secondary induction coil or faradic battery. But this use of a rheostat, that is, as a Faradameter, was fully discussed in the last number of this BULLETIN.

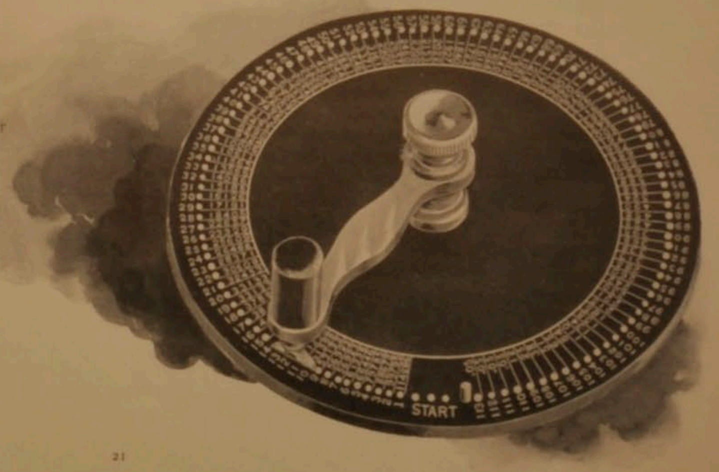
Willms Calibrated Current Controller

FARADAMETER

Calibrated as suggested by Prof. Wm. J. Herdman,
University of Michigan.

Code—Canoe.
Size, 6¾x6¾x2½ inches.
Weight, 1½ pounds.
Maximum resistance, 200,000 ohms or more.
Minimum resistance, less than 1 ohm.
Price, net, $20.00.

The Calibrated Controller can be supplied with all our
Constant Current and Combination Batteries
at an extra cost of $10.00.



MILAMMETER

A newly perfected, direct-reading Milammeter, encased in a non-magnetic, dust-proof, highly polished and nickel plated, seamless metal case, mounted on a finely finished mahogany base.

For the practitioner to attain assured results, the milammeter is of imperative need, and its great value for best medical results is now so universally recognized that it is scarcely necessary to say more in its favor. The purpose of the milammeter is to measure the current accurately, that its administration therapeutically may be made in proper and exact doses. It only remains to provide the operator with a good instrument, one on which he can rely, and which is at once delicate in its measurements, yet strong and durable in its general make-up.

Experience has demonstrated to us the desirable features to be embodied in a perfect instrument, namely:

It should be accurate.
Free from changes due to time and surroundings.
Friction of parts must be entirely overcome and avoided.
The free parts must be secured against accidental displacement.
Should be readable from either a standing or sitting position.
Should have a wide range of measurement.
Should be direct-reading without reference to tables or calculation.

All these points have been most fully met in the construction of the meter now offered to the profession.

By an entirely new and wonderfully simple arrangement, we have provided for the widest possible compass, together with direct-reading scales. Stamped at equal distances apart on the three faces of a celluloid roller there are three scales to select from—one for currents ranging from zero to ten milliamperes, divided into two-fifths; another for currents ranging from zero to fifty, divided into two milliamperes, and the other for currents ranging from zero to two hundred and fifty, divided into tens. The first is for ordinary work, and will be the one most used; the others are for heavier work, and are seldom brought into requisition. The roller is placed in the face of the meter, under the end of the pointer, on a shaft which passes through the side of the case, and terminates in a button by which the roller may be turned. In connection with this roller is our novel device inside the case, by which, when the roller is turned so as to bring any of the three scales to view under the pointer, the connections within the case are automatically adjusted so as to cause the meter to read *directly* and *accurately*, according to the scale so exposed to view. By this means the physician is saved the trouble of using multipliers with his scale readings, and has at command three separate scales, meeting every desirable case, and each scale reading his measurements directly, without reference to tables.

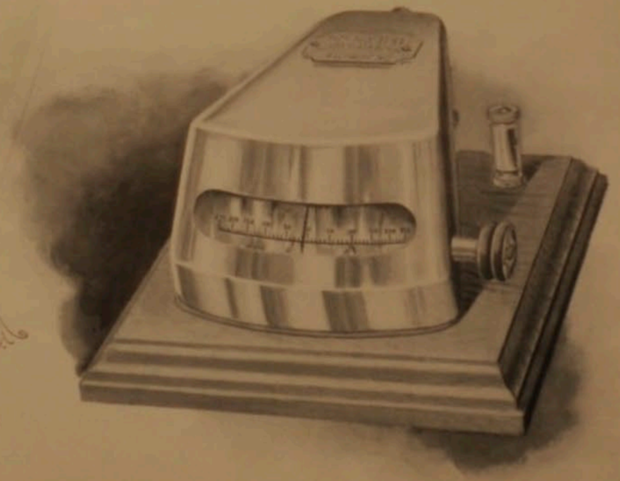
The satisfaction which physicians have in this novel and radical improvement in meters, together with the superiority of our meter in every other desirable characteristic, makes this instrument worthy of exclusive use.

The better class of the instrument trade, as well as the medical profession in general, have liberally supported us in the manufacture of our meters. Over and over again we have been asked to produce a good meter at a price which would enable every doctor using a galvanic battery to possess one. However, cheapness is not the sole aim of our milammeter; though sold at an extremely reasonable figure, nevertheless it is the equal of many others of higher cost. In point of quality it is unsurpassed by any similar instrument.

N. B.—When purchasing a meter, see that our name is stamped upon it, in order to prevent unscrupulous dealers from substituting an inferior instrument for our goods.

Code—Caper.

Price, . . . $20.00



MILAMMETER

Constant Current Galvanic Battery
№10

The Battery consists of a number of Chloride of Silver Galvanic Interchangeable Dry Cells, arranged in series, attached to a cell-supporting plate of insulating material. Over this is placed a highly polished hard rubber plate, completely concealing the cells from view. The 25-cell batteries are arranged so that the operator may select the cells in groups of five, the 35-cell batteries in groups of seven, and the 50-cell batteries in groups of ten. As it is seldom necessary to use the whole number of cells at one time while operating on sensitive portions of the body, this arrangement makes it possible to greatly economize the life of the cells. And besides the economy, it has been found desirable to use only as many cells as may be required for each particular class of work.

The binding posts, current reverser, cell selector, and Willms Current Controller are most conveniently and substantially arranged on top of the hard rubber plate, so that they can be readily manipulated.

We direct special attention to the description of the Willms Current Controller on pages 18 and 19. The importance of having such a controller is universally admitted, for with its aid the mild current can be applied to portions of the human body which otherwise would not be amenable to electric treatment.

The battery case is made of mahogany, handsomely finished, is provided with a good lock, and in the lower portion of it is a compartment or drawer containing a black enameled tray sufficiently large to accommodate quite a number of electrodes. The following accessories accompany each battery and are included in the price: Pair silk covered conducting cords, pair round sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench, plugs for testing cells, and screw driver.

CATAPHORESIS.

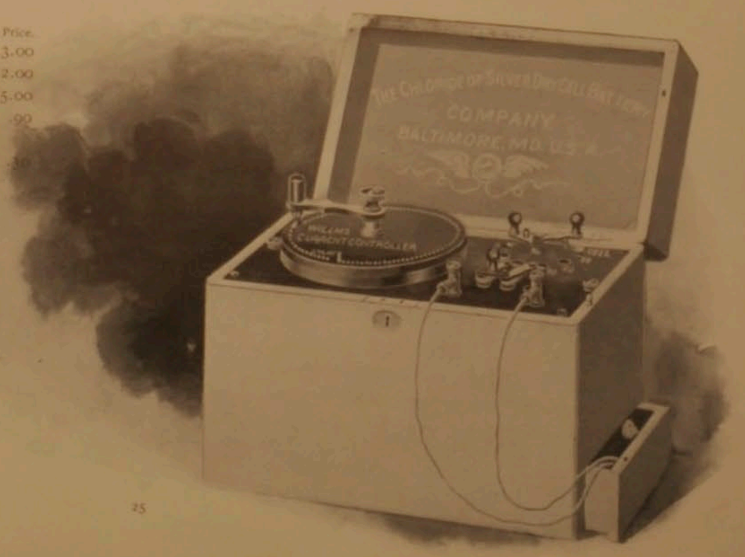
For Dental Cataphoresis the Nos. 10 and 11 batteries are producing splendid results and are largely in demand, the 25-cell batteries being the size generally used. The most eminent dentists have pronounced our apparatus the best procurable for cataphoric work, realizing that our cells produce the only current which is perfectly constant, and that no other rheostat can graduate the dosage of current so smoothly and minutely as the Willms Current Controller.

SPECIFY "DENTAL" WHEN BATTERIES ARE ORDERED FOR DENTISTS.

Constant Current Galvanic Battery
№10

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Carat .	25-cell, 12x7¼x11¼ in. .	13½ lbs. .	$43.00
Cargo .	35-cell, 12x7¼x11¼ in. .	14½ lbs. .	52.00
Carle .	50-cell, 12x7¼x11¼ in. .	16 lbs. .	65.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30



Constant Current Galvanic Battery
№11

To very sensitive portions of the body it is safe to apply only a limited amount of current, and in cases where it is necessary to know how much current is passing, the physician must have a milammeter. The purpose of such an instrument is to measure the current accurately, so that it may be applied in proper and exact doses. In our newly perfected three-scale, direct-reading milammeter (fully described on pages 22 and 23) we have provided an instrument moderate in price, yet embodying all the features requisite to insure accuracy. After thorough examination and careful tests, many of the most prominent electro-therapeutists have adopted our meter in preference to all others.

The No. 11 Battery is provided with our Improved Milammeter, permanently connected, and also has a switch so arranged that the meter may be placed either in or out of circuit.

The battery consists of a number of Chloride of Silver Galvanic Interchangeable Dry Cells, arranged in series, attached to a supporting plate of insulating material, over which is placed a highly polished hard rubber plate, all cells and connections being concealed from view. The 25-cell batteries are arranged so that the operator may select the cells in groups of five, the 35-cell batteries in groups of seven, and the 50-cell batteries in groups of ten.

The apparatus contains also :—

Willms Current Controller, by which the current can be applied so smoothly and evenly that the patient will not receive the slightest shock.

Current Reverser, for convenience in changing the polarity while the electrodes are applied to the patient.

Cell Selector, permitting the operator to practice economy by using only as many cells as may be required.

The case is made of mahogany, highly polished, and is provided with a lock and a compartment or drawer, in which will be found the following : Pair silk covered conducting cords, pair round sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench, plugs for testing cells, and screw driver.

CATAPHORESIS.

While some dentists make cataphoric applications without using a meter, experienced and very careful practitioners would not undertake the work without such an instrument. The No. 11 Battery, with our Chloride of Silver Cells, Willms Current Controller, Improved Milammeter, and Platinum Applicators, is by far the most efficient cataphoric outfit obtainable. The 25-cell battery is the size generally used, although some dentists prefer 35, or even 50 cells.

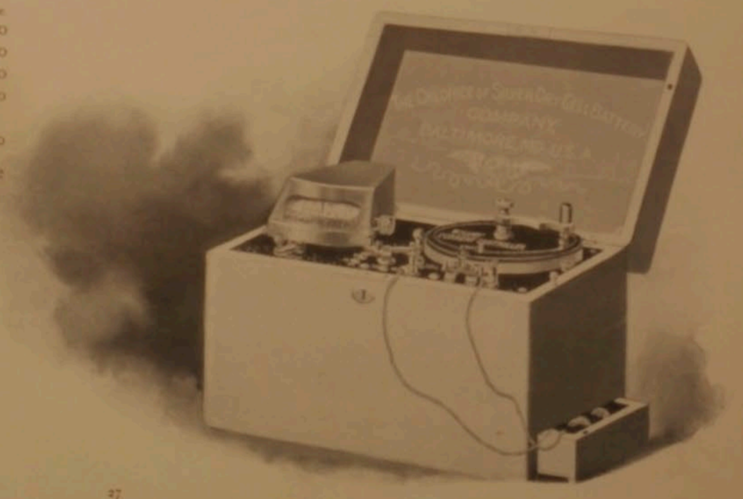
SPECIFY "DENTAL" WHEN BATTERIES ARE ORDERED FOR DENTISTS.

Constant Current Galvanic Battery
№11

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Caste	25-cell, 13⅛x8¾x11¼ in.	16¾ lbs.	$63.00
Castle	35-cell, 13⅛x8¾x11¼ in.	18 lbs.	72.00
Castor	50-cell, 13⅛x8¾x11¼ in.	19½ lbs.	85.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30

(Batteries containing more than 50 cells will be made to order at short notice.)



Constant Current Galvanic Battery

No. 15

A very extensive demand now exists for a battery containing a first-class Automatic Rheotome, and after many experiments we succeeded in producing one superior to all others on the market. It is constructed of the best material and presents an elegant appearance. While strong, durable and efficient, it is at the same time small enough to be placed permanently in the circuit with our battery. There is no other battery extant containing from twenty-five to fifty cells, a current controller and automatic rheotome that is at the same time portable.

The apparatus consists of:—

Chloride of Silver Galvanic Interchangeable Dry Cells, arranged in series, attached to a plate of insulating material, which in turn is covered by a hard rubber top plate concealing the cells and connections from view.

Automatic Rheotome of a design original with ourselves, capable of furnishing a great variety of interruptions, ranging from six to nine hundred per minute. Connected with the rheotome is a switch by means of which this instrument can be placed either in or out of circuit.

Willms Current Controller, which permits the operator to graduate the current so smoothly and evenly that the patient will not receive the slightest shock.

Current Reverser, for convenience in changing the polarity while the electrodes are applied to the patient.

Cell Selector, enabling the operator to economize by using only the number of cells that may be required for each operation.

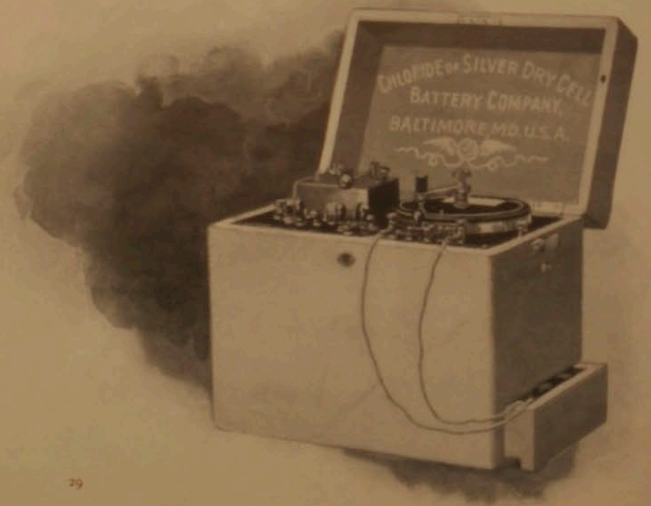
The case is made of mahogany, highly polished, and is provided with a good lock. In the lower portion of it will be found a tray containing: Pair silk covered conducting cords, pair round sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for removing cells, plugs for testing cells, and screw driver.

Constant Current Galvanic Battery

No. 15

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Catch	25-cell, 13⅛x8¾x11¼ in.	16¼ lbs.	$53.00
Cater	35-cell, 13⅛x8¾x11¼ in.	17½ lbs.	62.00
Cause	50-cell, 13⅛x8¾x11¼ in.	19 lbs.	75.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30



Constant Current Galvanic Battery

Nº16

This is the most elaborate galvanic battery ever manufactured. While some classes of work require only cells and a current reverser, other work requires a controller; then again, a meter is necessary, while at times an automatic rheotome is wanted. The usefulness of all these instruments is now fully understood, and the general practitioner realizes how very desirable it is to have them all combined in a battery so compact and light as to be easily portable. Our object has been to secure the most varied results with the galvanic current and to bring all the various parts into harmonius action in as compact a space as possible. How thoroughly our aim has been accomplished in this perfected apparatus will readily be seen by reading the following description. The battery contains:

Chloride of Silver Galvanic Interchangeable Dry Cells.

Willms Current Controller, the only perfect rheostat.

Improved three-scale direct reading Milammeter, with switch for placing this instrument either in or out of circuit.

Automatic Rheotome of our own original design, capable of furnishing a great variety of interruptions, ranging from six to nine hundred per minute, with a switch for placing the instrument either in or out of the circuit.

Current Reverser, for convenience in changing the polarity while electrodes are applied to the patient.

Cell Selector, enabling the operator to practice economy by using only the required number of cells.

The cells and all connections are concealed from view beneath the hard rubber top plate. The mahogany case is handsomely finished, is provided with a good lock, and in the lower portion has a compartment containing a black enameled tray with the following accessories: Pair silk covered conducting cords, pair round sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for removing cells, plugs for testing cells, and screw driver.

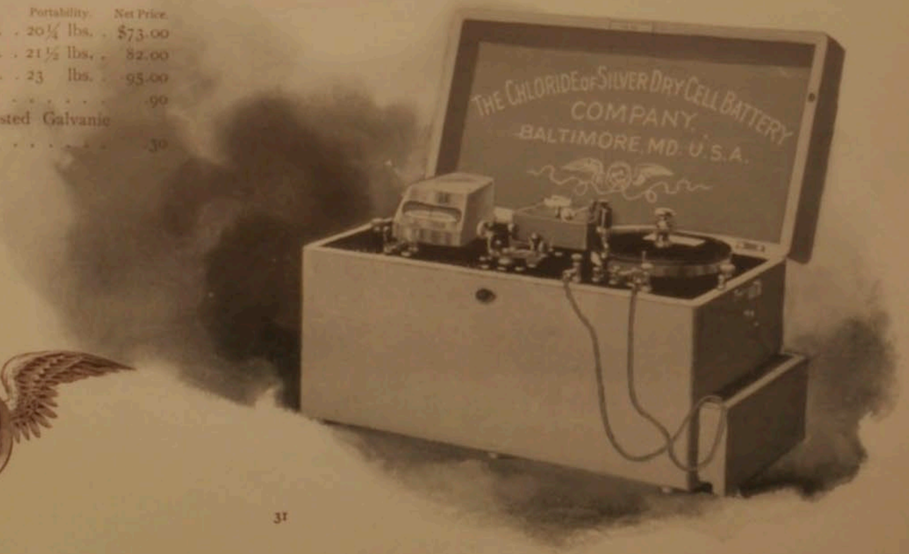
Prior to the introduction of the No. 16 there was no portable battery which contained so many advantages; combined in one apparatus they could only be found in large office cabinets.

Constant Current Galvanic Battery

Nº16

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Chain	25-cell, 18x9½x10⅜ in.	20¼ lbs.	$73.00
Champ	35-cell, 18x9½x10⅜ in.	21½ lbs.	82.00
Chase	50-cell, 18x9½x10⅜ in.	23 lbs.	95.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30



Combination Galvanic and Faradic Battery
No. 13

The No. 13 combines in one apparatus all the features and advantages comprised in the latest models of our Galvanic and Faradic batteries. It is the most complete and elegant portable battery ever manufactured, and contains all the advantages that formerly could be obtained only in a large office cabinet. No other battery containing all these features has ever been offered in such compact and convenient form. It is equipped with :

Fifty Chloride of Silver Galvanic Interchangeable Dry Cells.

Sufficient Chloride of Silver Faradic Interchangeable Dry Cell Cases for any work in which faradization would be used.

Willms Current Controller, for graduating both the Galvanic and Faradic currents, offering a maximum resistance of over two hundred thousand ohms and a minimum resistance of less than one ohm.

Superior coils containing a primary and four secondaries of different sizes and lengths of wire, so arranged that the primary and secondaries may be used independently or in combination, placing nineteen distinct currents at the command of the operator. The first secondary is composed of No. 30 wire, the second secondary of No. 26 wire, the third secondary of No. 24 wire, the fourth secondary of No. 22 wire.

An Automatic Rheotome (or Interrupter) of our own design, capable of supplying a variety of interruptions, ranging from six to nine hundred per minute, which can be used for both the Galvanic and Faradic currents.

A Cell Selector for the Galvanic and one for the Faradic battery, permitting the practice of economy by using only as many cells as are required in each operation.

Our improved Three-scale Direct Reading Milammeter, for measuring the Galvanic current, with switch for throwing it in or out of circuit.

A Switch, for combining the Galvanic and Faradic currents, so that the two currents may be applied together and at the same time. This is one of the features possessed by no form of portable battery except ours.

A Current Reverser, for convenience in changing the polarity while the electrodes are applied to the patient.

A Current Breaker, for diagnostic purposes.

A Contact Key, for starting the Faradic current.

The case is of beautiful mahogany, highly polished, and in the lower portion has a compartment or drawer containing : Silk covered conducting cords, sponge electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for use in removing cells, plugs for testing cells, screw driver.

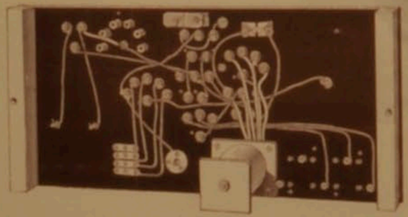
Combination Galvanic and Faradic Battery
No. 13

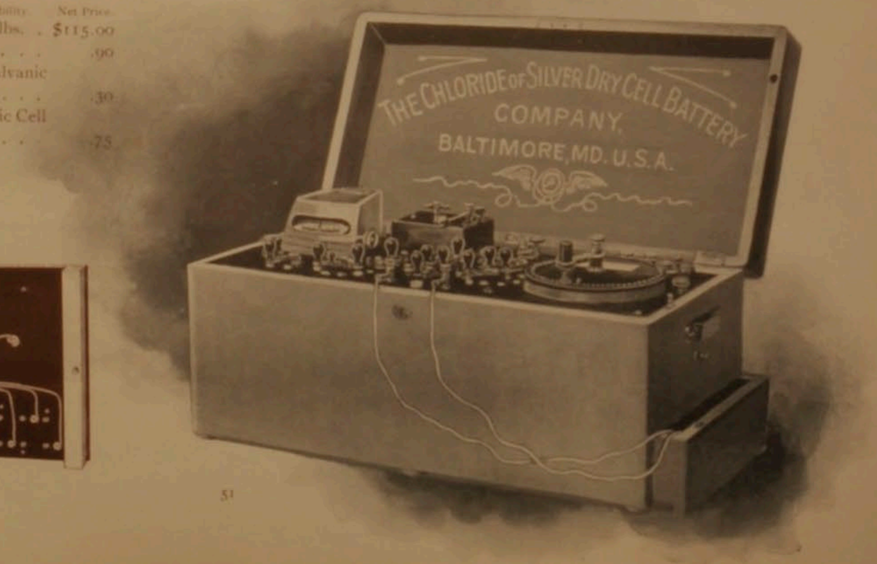
F O B Troy

X

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Glory	50-cell, 21x10½x9¾ in.	33 lbs.	$115.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30
Renewing and restoring exhausted Faradic Cell Cases, each			.75





Pocket Faradic Battery
No. 7

Probably no one of our instruments has proven its usefulness so thoroughly as the one illustrated on the opposite page. The remarkable success of these "Pocket" Batteries, their high quality, their simplicity, and the ease with which they can be handily carried and operated, have proven their construction to be of the best. In this instrument we have met a want which every physician recognizes—a battery of the type commonly known as the "Pocket" Faradic, with every quality necessary in emergency, satisfactory to the user, free from all the trouble and nastiness of the old wet cell, of beautiful finish and low price. Being small and light, and operated by permanently sealed dry cells producing a splendid current, it can be carried about without discomfort or risk of soiling the clothing or ruining other instruments of the owner. Thousands of them are now snugly reposing in the emergency satchels of as many physicians throughout the country, ready to respond whenever they are called upon, for there is absolutely no waste of the elements when the battery is not in operation. In cases of poisoning, suspended animation, etc., etc., a physician needs just such an instrument, and needs it at once. This battery is also a great favorite with the medical profession when recommending a Faradic machine to patients for home use.

This instrument is put up in a handsomely finished mahogany case, furnished with a pair of conducting cords, pair nickel plated canulas, pair ebonized handles, and a pair flannel-covered carbon electrodes. The induction coil, giving three currents—primary, secondary, and combined—is of superior make and finish, and has no equal anywhere in the uniformity and smoothness of its current.

All exposed metal parts are heavily nickel plated by our own process, insuring durability and a beautiful appearance at all times, provided the battery is not abused.

The Cell Cases are concealed from view beneath a polished hard rubber plate. Contact points of the buzzer spring are made of platinum, which is the hardest, best, and, at the same time, most costly metal procurable for such purposes. As soon as the electrodes are attached it is only necessary to insert the contact key in the socket, when the battery immediately starts to work.

The Cell Cases of this battery will yield one hundred hours of actual work, and the cost of operating is only 1½ cents per hour.

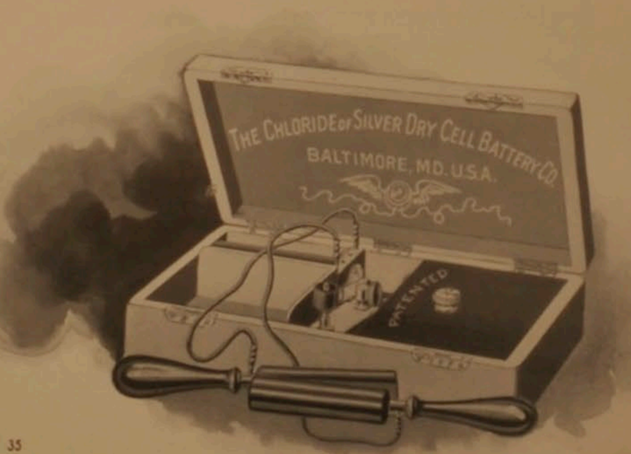
Pocket Faradic Battery
No. 7

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Earn . . .	9¾x4⅞x2⅜ in. . . .	2¾ lbs. . .	$10.00

Renewing and restoring exhausted Cell Cases, each 75

Or $1.50 for the two. If Cell Cases are ordered to be returned by mail, add 13c. postage.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.
PATENTED

Upright Faradic Battery No 6

The Faradic Battery No. 8, containing Willms Current Controller, having met with such a favorable reception from the medical profession, we have been encouraged to act upon the advice received from numbers of our friends among the physicians of the country, to devise a Faradic battery, containing a similar current controller, but of a form which would permit us to sell it at a price that would place it within the reach of every family; thus enabling the profession to prescribe it to those patients who are in need of Faradic treatment, but the seat of whose ailment is in very sensitive parts of the body, precluding the use of batteries which do not contain such an instrument for delicately varying the current strength. Our "Upright" Faradic Battery, No. 6, fully answers these requirements, and is, besides, an instrument which we have no hesitancy in recommending to those physicians who do not care to purchase a high priced instrument for their professional wants, but who naturally wish to make a small investment to the best advantage.

Each one of these instruments is contained in a handsomely finished mahogany case, presenting an elegant appearance, all the metal parts being heavily nickel plated.

This battery will furnish three currents: The primary (or so-called direct) current, the secondary (or induced) current, and a combination of the primary and secondary currents. A roomy compartment is provided in the lower part of the battery case, in which will be found two insulated handles, two sponge electrodes, two nickel plated canulas, and one pair silk covered conducting cords.

The Cell Cases are placed beneath the top plate, which conceals them from view. The battery is always ready for work. As soon as the electrodes are attached and the contact key inserted in the socket, the current may be applied at once, either in the minutest doses or with the full strength of current obtainable from two of our Faradic Cell Cases induced by most excellent coils.

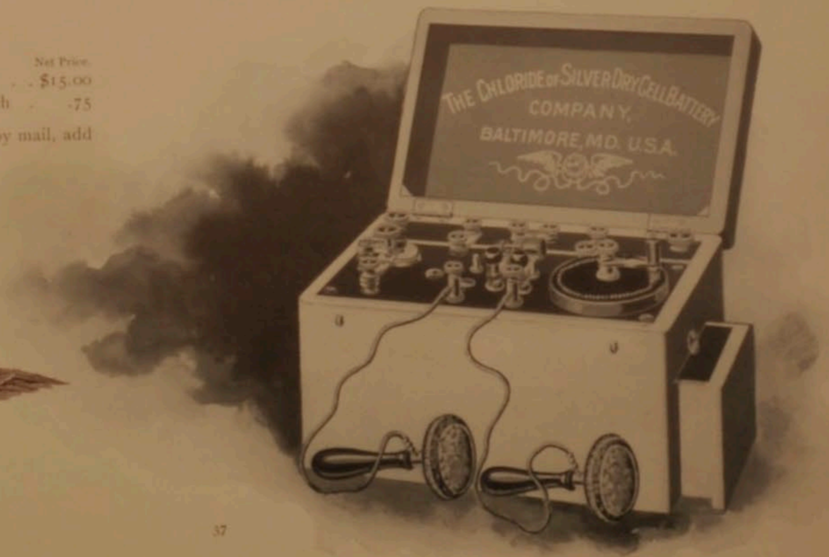
As the Cell Cases have a life of one hundred actual working hours, it costs but 1½ cents for each hour's work obtained from the instrument.

Upright Faradic Battery No 6

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Earth . . .	9⅜x5⅞x7 in. . . .	6¼ lbs. . . .	$15.00
Renewing and restoring old Cell Cases, each .			.75

If Cell Cases are ordered to be returned by mail, add 13 cents postage.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY,
BALTIMORE, MD. U.S.A.

Faradic Battery No. 14

An examination of our Faradic Battery No. 14 will convince anyone that in it is given more value than can be secured in the purchase of any other battery at or near the same price. Too much cannot be said in praise of this apparatus, containing, as it does, many more desirable features and really more good points than can possibly be treated in this brief description. It is designed to meet the wants of the busy practitioner, as well as those of his patients who may require a strong, smooth current, that can be evenly and gradually administered without semblance of a shock.

This battery differs essentially from any Faradic machine ever before constructed. We take pleasure in recommending it in the highest terms both to the medical profession and to the trade. It contains four Chloride of Silver Faradic Interchangeable Dry Cell Cases, attached to a hard rubber plate and concealed from view. Fig. E illustrates the Cell Cases attached to supporting plate as they appear when lifted out of battery case.

The coils are three in number, *i. e.*, a primary and two secondaries, each being wound with a different size of wire, the primary with No. 26 wire, the first secondary with No. 22, the second secondary with No. 32, each possessing an entirely different therapeutic value, as agreed by all the most advanced thinkers and workers in electro therapy. The primary and secondaries may be used independently or in combination, placing five distinct currents at the command of the operator.

The current in this battery is graduated by means of the Willms Current Controller, placed permanently in the circuit, insuring the most perfect control over the variations of current strength. With its aid the current can be administered so mildly as to be scarcely perceptible to the most nervous or delicate person, and can be increased so gradually and evenly that no shock will be given. Still, the maximum power that can be obtained is sufficient for any case for which Faradization would be used in ordinary practice.

A Cell Selecting Switch is provided, by means of which either two, three or four Cell Cases may be used at a time, permitting the practice of economy; also a Current Reverser, and a Contact Breaker for diagnostic purposes.

Much care has been observed in the arrangement of all switches and connections, with the view of making them as simple and easy to understand as possible. Not only is it most suitable for the physician, but he can without hesitation recommend it to those of his patients desiring a complete Faradic apparatus.

The case is of mahogany, highly polished, provided with a good lock, and in the lower portion is a compartment or drawer containing the following: One pair silk covered conducting cords, one ebonized plain handle, one ebonized interrupting handle, one pair best quality sponge electrodes, and one contact key for starting the current.

The intrinsic merits of this battery are evidences of the highest form of technical skill, causing our friends to wonder how it can be offered at such a moderate price.

Faradic Battery No. 14

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Easy	10¾x7½x7 in.	8½ lbs.	$20.00
Renewing and restoring exhausted Cell Cases, each			.75

Or $3.00 for the four. If Cell Cases are ordered to be returned by mail, add postage, 7 cents each.

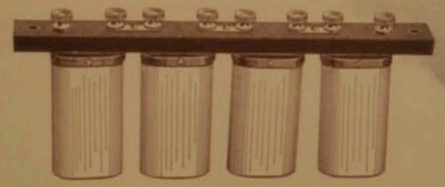
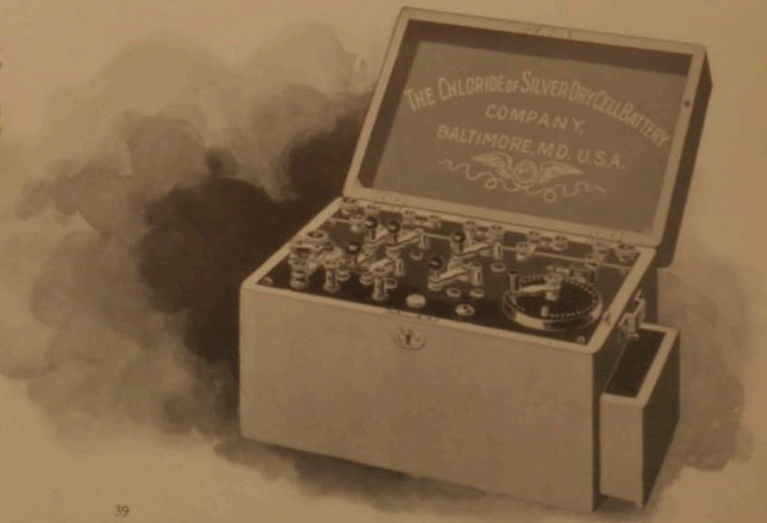


FIG. E.



Faradic Battery No. 8

This is the most magnificent Faradic battery ever constructed, containing in compact and portable form every appliance that the busiest physician or specialist could desire in such an apparatus. The cells and connections are concealed from view beneath the hard rubber plate, all the switches, etc., being most conveniently arranged on top of the plate, as shown in illustration. Its leading points of superiority are as follows:

Sufficient Chloride of Silver Faradic Interchangeable Dry Cell Cases for any work in which faradization would be used.

Willms Current Controller placed permanently in the circuit, enabling the operator to graduate the current so finely that it may be applied with perfect safety to the most delicate portions of the human body, such as the mucous membrane of the throat, penis, vagina, rectum, etc., etc.

Superior coils containing a primary and four secondaries of different sizes and lengths of wire, so arranged that the primary and secondaries may be used independently or in combination, placing nine distinct currents at the command of the operator. The first secondary is composed of No. 30 wire, the second secondary of No. 26 wire, the third secondary of No. 24 wire, the fourth secondary of No. 22 wire.

In addition to the Rapid Interrupter furnished with all Faradic batteries, the No. 8 is also supplied with a Slow Interrupter of the most improved pattern, permitting any desired number of interruptions to be made.

Current Reverser, for convenience in changing polarity while the electrodes are applied to the patient.

Current Breaker, for diagnostic purposes.

A Switch, for placing either two, three or four Cell Cases in the circuit, so that they may be used with economy.

Price includes one pair silk covered conducting cords, one ebonized plain handle, one ebonized interrupting handle, one pair No. 37 sponge electrodes, one contact key for starting the current.

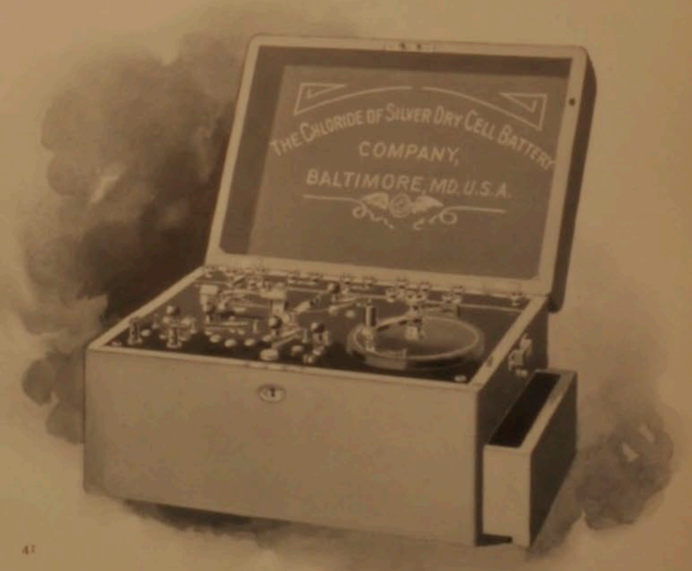
Faradic Battery No. 8

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Eddy . . .	14⅛x10x8¼ in. . .	16 lbs. . . .	$35.00

Renewing and restoring exhausted Cell Cases, each 75

Or $3.00 for the four. If Cell Cases are ordered to be returned by mail, add postage, 7 cents each.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY,
BALTIMORE, MD. U.S.A.

WILLMS CURRENT CONTROLLER

Combination Galvanic and Faradic Battery
No 2

* The demand for portable batteries containing both the Galvanic and Faradic currents has increased from year to year, and we have succeeded in retaining the lead in such styles of instruments by making our goods so perfect that they are beyond competition. This instrument is one of our most popular creations, and cannot fail to command the attention of every physician in search of a complete apparatus. We are confident it will meet the approval of every purchaser.

The Galvanic portion of this instrument is precisely the same in every particular as the No. 1 Battery preceding, and therefore needs no further description here.

The No. 14 Battery, illustrated and described on pages 38 and 39, having become a favorite even beyond our expectations, we have constructed the Faradic part of this combination battery in the same style. The two present precisely the same appearance, so that our No. 2 Combination is practically the No. 1 Galvanic and No. 14 Faradic Batteries combined in one case, forming a most elegant, light and portable combination apparatus, which cannot be too highly recommended to those who are in search of a first-class battery of the kind. Such an instrument, if but moderately well taken care of, should be practically a good one even after having been in daily use for many years.

(Note also description of our No. 19 Combination Battery.)

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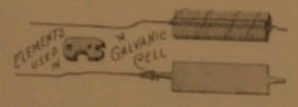
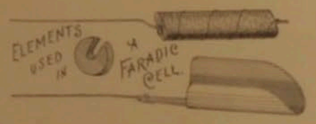
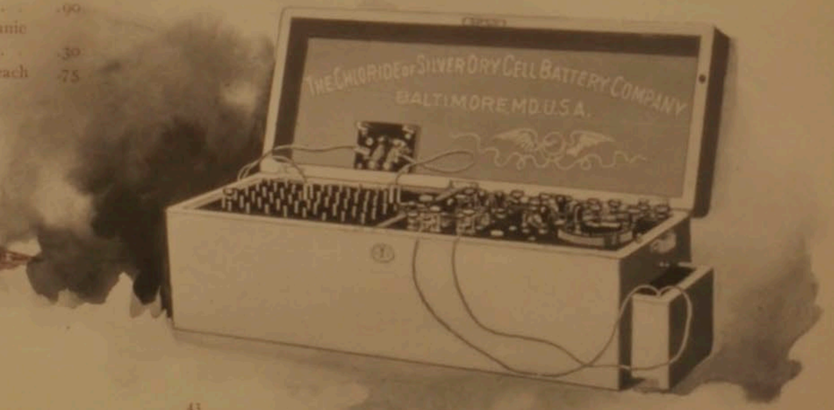




Combination Galvanic and Faradic Battery
No 2

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Gage	. 24-cell, 16¼x7⅞x7⅝ in. .	15¾ lbs. .	$47.00
Gain	. 32-cell, 17⅞x7⅞x7⅝ in. .	17 lbs. .	55.00
Gaul	. 50-cell, 20⅝x7⅞x7⅝ in. .	20½ lbs. .	70.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30
Renewing and restoring Faradic Cell Cases, each			.75


THE CHLORIDE OF SILVER DRY CELL BATTERY COMPANY
BALTIMORE MD U.S.A.

Combination Galvanic and Faradic Battery

No. 19

In order to meet the demands for a low priced apparatus, combining both the Galvanic and Faradic currents controlled by the Willms Current Controller, the No. 19 Battery is now listed by us for the first time, and is sure to become very popular, as the experienced practitioner needs no explanation to convince him of the desirability of possessing a battery so arranged, rather than one containing a water rheostat. The Galvanic and Faradic currents can be applied in the minutest doses and with perfect smoothness, either singly or in combination.

The cell posts and all connections are concealed from view beneath the hard rubber top plate. The apparatus contains:

Chloride of Silver Galvanic Interchangeable Dry Cells.

Four Faradic Interchangeable Dry Cell Cases.

Superior Coils, comprising one primary and two secondaries, so arranged that the primary and secondaries may be used independently or in various combinations, thus placing a number of distinct currents at the command of the operator.

Cell Selector for the Galvanic and one for the Faradic part of the battery, permitting the operator to practice economy by using only as many cells as each case requires.

Current Reverser, for convenience in changing the polarity while the electrodes are applied to the patient.

Switch, for combining the Galvanic with the Faradic current, so that the two currents may be applied at the same time.

Current Breaker, for diagnostic purposes.

Contact Key, for starting the Faradic current.

The case is of mahogany, highly polished, is provided with a substantial lock, and in the lower portion has a compartment containing a tray and the following accessories: Pair silk covered conducting cords, pair sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for use in removing cells, plugs for testing cells, and screw driver.

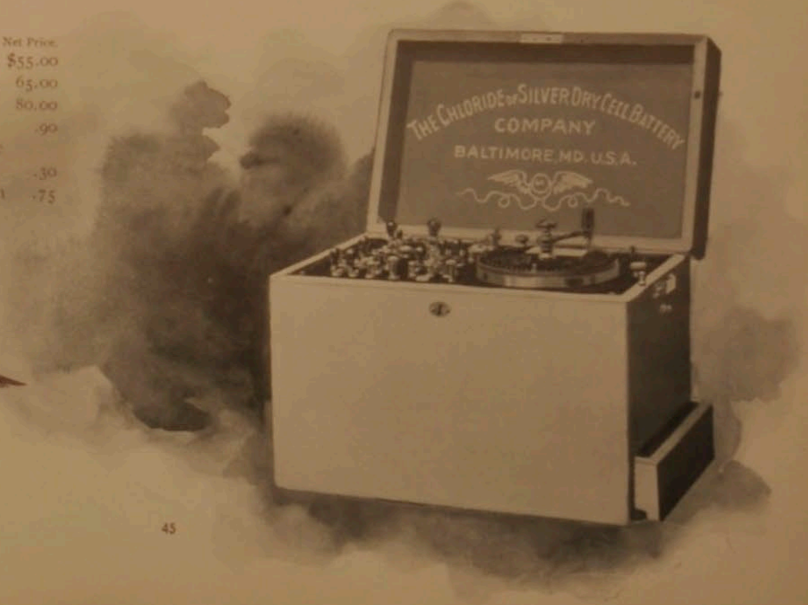
(This battery is the same in every particular as the No. 17, except that it contains no Milammeter.)

Combination Galvanic and Faradic Battery

No. 19

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Gate	. 25-cell, 15⅛x9⅝x11⅛ in.	. 23¾ lbs.	. $55.00
Gear	. 35-cell, 15⅛x9⅝x11⅛ in.	. 25 lbs.	. 65.00
Gem	. 50-cell, 15⅛x9⅝x11⅛ in.	. 26⅕ lbs.	. 80.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30
Renewing and restoring Faradic Cell Cases, each			.75



Combination Galvanic and Faradic Battery No 18

Physicians realize the importance of being able to obtain a variety of interruptions for diagnosis, as well as for the treatment of paralyzed muscles, etc., and have frequently requested us to make such a battery as we present herewith for the first time.

A distinguishing feature of this battery is the Automatic Rheotome, designed by us, which is first-class in every respect and capable of interrupting the current from six to nine hundred times per minute. It is encased in highly polished hard rubber and mounted on a base of the same material.

The cell posts and connections are concealed from view beneath the hard rubber top plate. The apparatus contains also :

Chloride of Silver Galvanic Interchangeable Dry Cells.

Four Faradic Interchangeable Dry Cell Cases.

Faradic Coils containing a primary and two secondaries, arranged so that the primary and secondaries may be used independently or in various combinations, placing eleven distinct currents at the command of the operator.

Cell Selector for the Galvanic and one for the Faradic part of the battery, making it possible to economize by using only the number of cells that may be required.

Current Reverser, for convenience in changing the polarity while the electrodes are applied to the patient.

Switch for combining the Galvanic with the Faradic current, so that the two currents may be applied at the same time.

Current Breaker, for diagnostic purposes.

Contact Key, for starting the Faradic current.

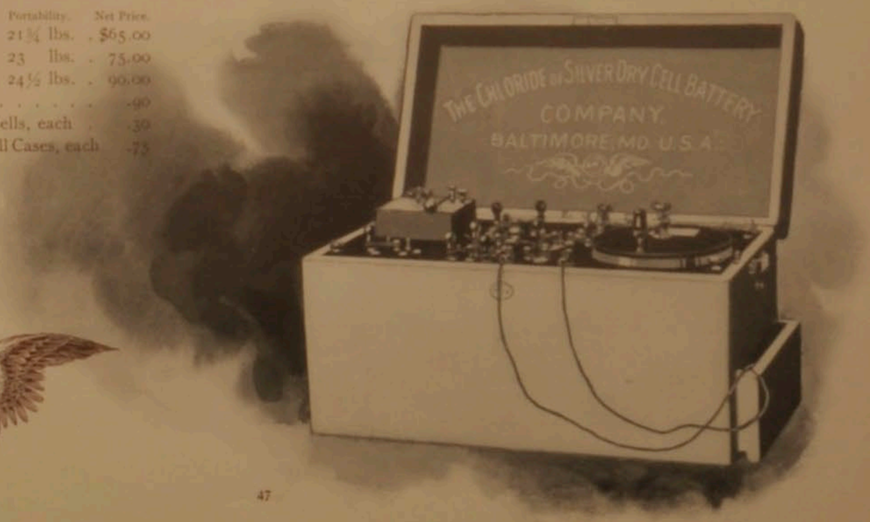
The case is of mahogany, handsomely polished, and is provided with a lock, and in the lower portion is a compartment or drawer, containing a tray and the following: Silk covered conducting cords, sponge covered electrodes, ebonized plain handle, ebonized interrupting handle, nut wrench for use in removing cells, plugs for testing cells, and screw driver.

(The No. 18 is the same in every respect as the No. 17, except that it contains no Milammeter, but in place of same has the Automatic Rheotome.)

Combination Galvanic and Faradic Battery No 18

PRICE LIST.

Code.	Compactness.	Portability.	Net Price.
Gift	25-cell, 18x9½x10¼ in.	21¾ lbs.	$65.00
Gig	35-cell, 18x9½x10¼ in.	23 lbs.	75.00
Giver	50-cell, 18x9½x10¼ in.	24½ lbs.	90.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring Galvanic Cells, each			.30
Renewing and restoring Faradic Cell Cases, each			.75



Combination Galvanic and Faradic Battery

No. 17

Among the higher priced combination batteries, none is more popular than the No. 17. It meets fully the requirements of the general practitioner as well as the specialist, and stands unrivalled in its class. The cells and all connections are concealed from view beneath the polished hard rubber top plate.

The battery is equipped with the celebrated Willms Dry Current Controller, which controls both the Galvanic and Faradic currents. This instrument has a maximum resistance of over 200,000 ohms, and a minimum resistance of less than 1 ohm. The currents can be used either separately or in combination, and can be applied so smoothly and easily that the most sensitive patient will not receive the slightest shock; but it is also possible to administer sufficient dosage for the most robust man.

The Faradic Coils are of superior construction, comprising one primary and two secondaries, so arranged that the primary and secondaries may be used independently or in various combinations, placing quite a number of distinct currents at the command of the operator. The apparatus also contains:

Chloride of Silver Galvanic Interchangeable Dry Cells.

Four Faradic Interchangeable Dry Cell Cases.

Cell Selector for the Galvanic and one for the Faradic battery, permitting the operator to practice economy by using only as many cells as are actually required for each case.

Our Improved Three-scale Direct Reading Milammeter for measuring the Galvanic current, with switch for throwing it in or out of circuit.

A Switch for combining the Galvanic with the Faradic current, so that the two currents may be applied together and at the same time.

Current Reverser, for convenience in changing the polarity while electrodes are applied to the patient.

Current Breaker, for diagnostic purposes.

Contact Key, for starting the Faradic current.

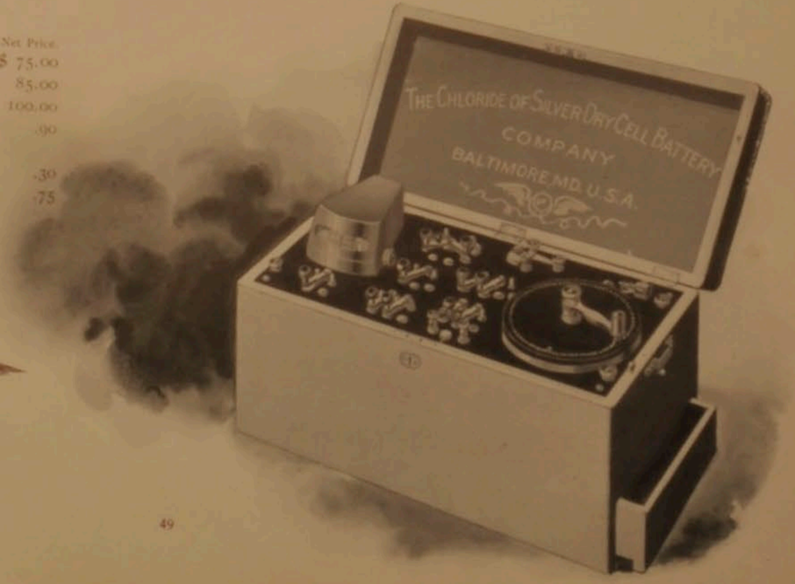
The case is of mahogany, highly polished, is provided with a substantial lock, and in the lower portion has a compartment containing a tray and the following accessories: One pair silk covered conducting cords, one pair sponge covered electrodes, one ebonized plain handle, one ebonized interrupting handle, one nut wrench for use in removing cells, plugs for testing cells, and screw driver.

Combination Galvanic and Faradic Battery

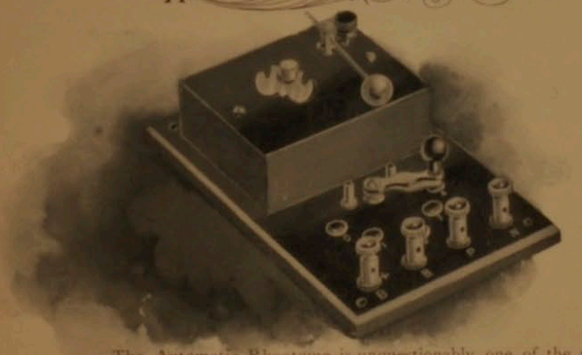
No. 17

PRICE LIST.

Code	Compactness	Portability	Net Price
Glad	25-cell, 18x9½x10¼ in.	22¼ lbs.	$ 75.00
Glaze	35-cell, 18x9½x10¼ in.	23½ lbs.	85.00
Gleam	50-cell, 18x9½x10¼ in.	25 lbs.	100.00
Cadet—New Galvanic Cells, each			.90
Renewing and restoring exhausted Galvanic Cells, each			.30
Renewing and restoring Faradic Cell Cases, each			.75


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY
BALTIMORE MD. U.S.A.

AUTOMATIC RHEOTOME



The Automatic Rheotome is unquestionably one of the most valuable factors in current variation, and its introduction has greatly enlarged the range and utility of both the Faradic and Galvanic currents. The Faradic battery is always provided with the ordinary vibrator—or buzzer, as it is commonly called, intensity of which is increased or lessened by changes of the coil or battery strength; but it has become advisable to obtain a variation of interruptions for diagnosis, as well as for the treatment of muscular troubles, paralysis, etc., when either the Galvanic or Faradic current is employed. The Automatic Rheotome as constructed by us commends itself in such cases. With clock-like regularity, it can be adjusted to interrupt the current from six to nine hundred times per minute. It is encased in highly polished hard rubber, and is mounted on a base of similar material. Its construction is most accurate and durable.

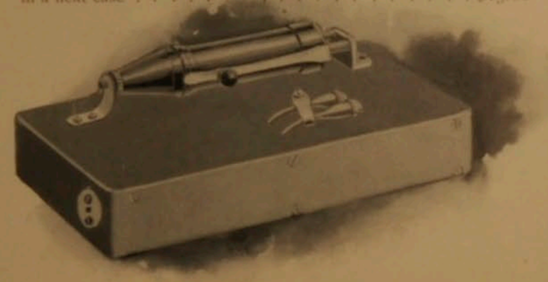
Price, in a neat case $10.00

ELECTRO-MAGNET

The Electro-Magnet has become an indispensable adjunct to the outfit of every surgeon and oculist, for accidents, such as the deposition of small particles of iron or steel in the eye. When bits of iron or steel have penetrated the posterior chamber of an eye it is almost impossible to remove them with ordinary instruments. In such cases the value of the Electro-Magnet is manifest, for with its assistance the offending particle can be quickly removed.

Our improvements have made it of real value to the profession. The foremost objection to the original patterns lay in the compulsory use of the wet cell, which usually was not in condition for service, thus preventing the use of the magnet when prompt action was imperative. Our type of magnet is always ready for immediate use, being supplied with the Chloride of Silver Dry Cells. Simply connect the conducting cords and press the contact spring, when the style at the end is immediately transformed into a powerful magnet of such attraction as to render the removal of the troublesome particle from the eye the work of a moment. The apparatus is neatly constructed in a mahogany case, is very light in weight, and of a form that may be carried in the pocket, if occasion requires.

Price of Electro-Magnet, with battery and cords, contained in a neat case $15.00



TESTIMONIALS

New York, N. Y.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO.

Gentlemen:—It is seldom that we feel justified in recommending any article not of our manufacture, but we can safely make an exception in favor of your Chloride of Silver Dry Cell Batteries.

These Batteries have been handled by us since they were first put upon the market, and we have sold over 1500 of them; nearly 200 of these of 50 cells or more each, and as they have given satisfaction we recommend them to all intending purchasers of batteries.

Yours respectfully, GEO. TIEMANN & CO.

St. Paul, Minn.

Gentlemen:—We have handled the Chloride of Silver Batteries from their early start, and have since sold many thousand dollars' worth of them. We think, for a portable battery, it is the best made; in fact, we do not consider any other make of portable battery compares with it. For those who want such a battery, we recommend it before all other makes we handle

Yours sincerely, NOYES BROS & CUTLER.
A. B. BRAND, Manager Surgical Instrument Dept.

San Francisco, Cal.

Kindly permit us to congratulate you with reference to the great improvements made of late on the Chloride of Silver Dry Cell Batteries; particularly the different Faradic instruments, in our opinion, cannot be excelled For neatness, cleanliness and portability, both have no equal The Galvanic Battery for Cataphoric work certainly proves to be very satisfactory.

Yours most respectfully, J. H. A. FOLKERS & BRO.

Memphis, Tenn.

We beg to inform you that we have sold more of your instruments than all others now on the market in our territory, and they have given universal satisfaction. It is a great pleasure to sell your goods, and we shall continue to do so as long as their high standard is maintained

Yours very truly, DUTRO & HEWITT.

Philadelphia, Penna.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO., Baltimore, Maryland.

Dear Sirs:—As we have handled your Batteries for over four years, we thought in justice to yourselves to inform you that we have had such success with your goods that we hardly sell any other than the Chloride of Silver Dry Cell Batteries.

We find that the Physicians have long ago desired some substitute for the old style fluid Batteries which were a constant source of annoyance, and we have no trouble in effecting a sale of your goods in comparison with the old style fluid batteries.

We now carry a full line of your goods and find the sale of them is constantly increasing. As mentioned to you personally, the many advantages contained in your Battery, such as compactness, cleanliness, and their constant current, are no doubt points which are working in their favor.

Respectfully yours, CHAS. LENTZ & SONS.

Cincinnati, Ohio.

We have sold most every kind of medical batteries, and do not hesitate in recommending the Chloride of Silver Dry Cell Batteries for their high standard of quality and finish. In selling same we are fully convinced that they will be satisfactory in the hands of the user, cost less for repairs, are always ready for use, and far superior to the old style batteries.

Yours truly, MAX WOCHER & SON.

Iowa City, Iowa.

I purchased a Galvanic Battery of your make some six months ago. I have been using it in my practice since, and say that it has given me entire satisfaction so far. I am delighted with the Willms Dry Current Controller. It produces no shock to patients and is a great improvement over the other methods that I have previously used.

Truly yours, J. C. SHRADER, A.M., M.D., LL D.,
Professor of Obstetrics and Gynæcology, Medical Dept.,
State University of Iowa.

Wall Cabinet

On the preceding pages we have illustrated all our portable batteries, explaining as briefly as possible their many advantages and points of superiority over those of other manufacture. We illustrate on the opposite page our latest designed Wall Cabinet, made to be permanently placed in the office of the physician, where it instantly asserts itself as one of the handsomest adjuncts, no matter how expensive the equipment. The woodwork is of mahogany, highly polished and finished, with richly carved rosettes and spindle adornments, but can be furnished to order in oak, cherry or walnut. The sides of the cabinet are of heavy glass, and the front consists of a door of beveled French plate, made so it may be raised or lowered at will, being balanced by weights which hold it at any height desired. It has a drawer in front, extending the full depth of the cabinet, which is secured by a neat pin, so that when the front door is down and locked the entire apparatus is secured.

Each cabinet contains: Fifty Chloride of Silver Interchangeable Dry Cells. Sufficient Chloride of Silver Faradic Interchangeable Dry Cell Cases for any case in which Faradization is used. Willms Current Controller. Automatic Rheotome, with switch for regulating the number of interruptions. Improved 3-scale Direct Reading Milammeter. Superior Coils, comprising a primary and four secondaries, which, used in combinations, place a great variety of currents at the command of the operator. Cell Selector for the Galvanic and one for the Faradic part. Switch for combining the Galvanic and Faradic currents, so that while using only one set of binding posts, the two currents may be applied either singly or in combination, as desired. Current Reverser, for convenience in changing the polarity. Current Breaker, for diagnostic purposes. Contact Key, for starting the Faradic current.

The coils, switches, etc., are larger and more elaborate than those contained in portable batteries, to give them an imposing appearance. The cells are hidden beneath the drawer at the back of the apparatus, in a cupboard which may be locked.

The Wall Cabinet is especially suited to the uses of the specialist, and when hung in its proper position on the wall consumes no valuable space, which is a most desirable feature where the office is of small size. Not alone are they in use by the most eminent specialists, but they have proven themselves of great importance in the offices of our prominent general practitioners. They are at once

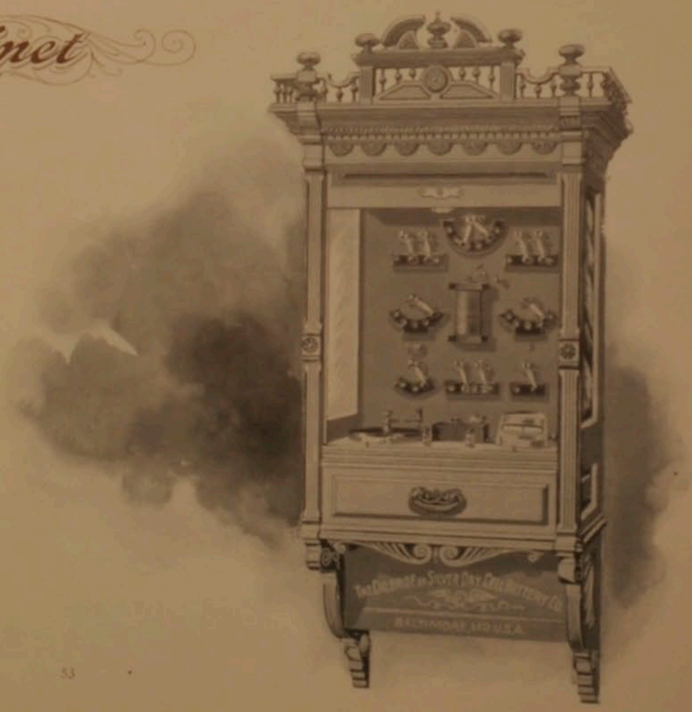
IMPOSING, ATTRACTIVE, CONVENIENT, AND EFFICIENT.

The following accessories will be found in the drawer: Pair silk covered conducting cords, pair sponge electrodes No. 37, hard rubber plain handle, hard rubber interrupting handle, nut wrench for removing cells, plugs for testing cells, and screw driver.

Wall Cabinet

Dimensions, 49x22½x13½ inches.
Net price, Wall Cabinet, complete, $150.00.
Code—Gloss.

(The name of the Company, as shown in illustration, does not appear on the Cabinet.)


BALTIMORE MD U.S.A.

WILLMS CURRENT CONTROLLER

Table Cabinet

The first Table Cabinet constructed by us was devised for use in the dispensary wards of the Johns Hopkins Hospital, Baltimore, ten years ago, and is still in daily use there. Since then many improvements have been made, adding several advantages over the original. The apparatus as now constructed is the handsomest and most complete cabinet before the profession. We cannot claim too much in its praise, either in general appearance or completeness of electrical detail.

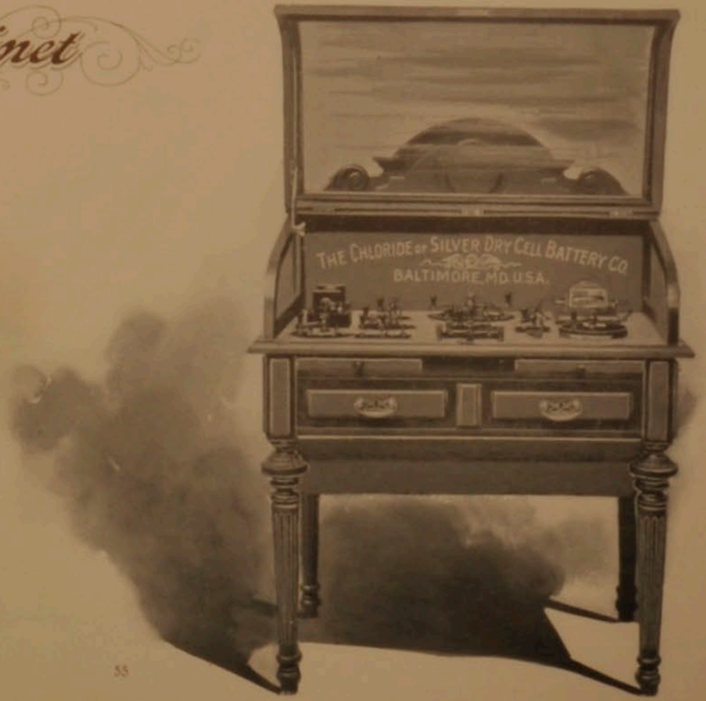
The woodwork is of the most select quartered oak, neat in design, elegantly carved and artistically trimmed, but can be furnished to order in walnut or cherry. The sides are made of heavy plate glass, the cover of curved beveled plate glass in one piece. Whether the cabinet is closed or open, the various appliances are exposed to view in a most imposing manner, and are so conveniently placed that when the cover is raised they may all be easily controlled by the operator. Opening in front are two drawers, provided with locks, having capacity for as many electrodes as any practitioner will require. All cells are hidden from view in the rear of the table in a compartment which may be locked to prevent anyone tampering with them.

This is the largest cabinet we manufacture, but all the parts are so well arranged and neatly adjusted that it has none of the cumbersome effects noticeable in other stationary electrical machines. The design is original, the pattern unique, the arrangement and finish are superb. After years of study and experience, protected as we are by patents, we claim that our Table Cabinet has been brought to a state of perfection unattainable by any other manufacturer.

The apparatus comprises: One hundred Chloride of Silver Galvanic Interchangeable Dry Cells. Sufficient Chloride of Silver Faradic Interchangeable Dry Cell Cases for any operation in which Faradization is used. Willms Current Controller. Automatic Rheotome, with switch for varying the number of interruptions. Improved 3-scale Direct Reading Milammeter. Superior Coils, comprising a primary and four secondaries, which, used in combinations, place a great variety of currents at the command of the operator. Cell Selector for the Galvanic and one for the Faradic part. Switch for combining the Galvanic and Faradic currents, so that both may be applied at the same time, if desired. Current Reverser, for convenience in changing the polarity. Current Breaker, for diagnostic purposes. Contact Key, for starting the Faradic current.

The following accessories are included: Pair silk covered conducting cords, pair sponge electrodes No. 37, hard rubber plain handle, hard rubber interrupting handle, nut wrench for removing cells, plugs for testing cells, screw driver, and full set of five assorted sponge electrodes No. 40, designed especially for cabinet equipment.

Table Cabinet


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

Dimensions, 48x35½20¼ inches.
Net price, Table Cabinet, complete, $225.00.
Code—Glowing.

(The name of the Company, as shown in illustration, does not appear on the Cabinet.)

Hospital Ward Rolling Table

* The first of these instruments, like the Table Cabinet, was designed especially for the Johns Hopkins Hospital, Baltimore. Its real capacity is the same as the Wall Cabinet or Table Cabinet, its peculiar advantages being the arrangements which make it useful in hospital wards. Being placed upon a carriage frame with soft rubber wheels, it may be moved from the bedside of one patient to that of another with the greatest ease and without the slightest noise. The woodwork is of quartered oak, beautifully finished and polished, but can be furnished to order in walnut or cherry. The front, sides and top of the cover are made of heavy plate glass; the cover is on hinges, so that it may be easily raised, thus permitting the operator to reach the various switches, etc. On each side is a large drawer with lock, the cells being in the rear, concealed in compartments which are also locked. Each table contains:

Fifty or one hundred Chloride of Silver Galvanic Interchangeable Dry Cells.

Sufficient Chloride of Silver Faradic Interchangeable Dry Cell Cases for any case in which Faradization is used.

Willms Current Controller.

Automatic Rheotome, with switch for controlling the number of interruptions.

Improved 3-scale Direct Reading Milammeter.

Superior Coils, comprising a primary and four secondaries, which, used in combinations, place a great variety of currents at the command of the operator.

Cell Selector for the Galvanic and one for the Faradic part.

Switch for combining the Galvanic and Faradic currents, so that both may be applied at the same time if desired.

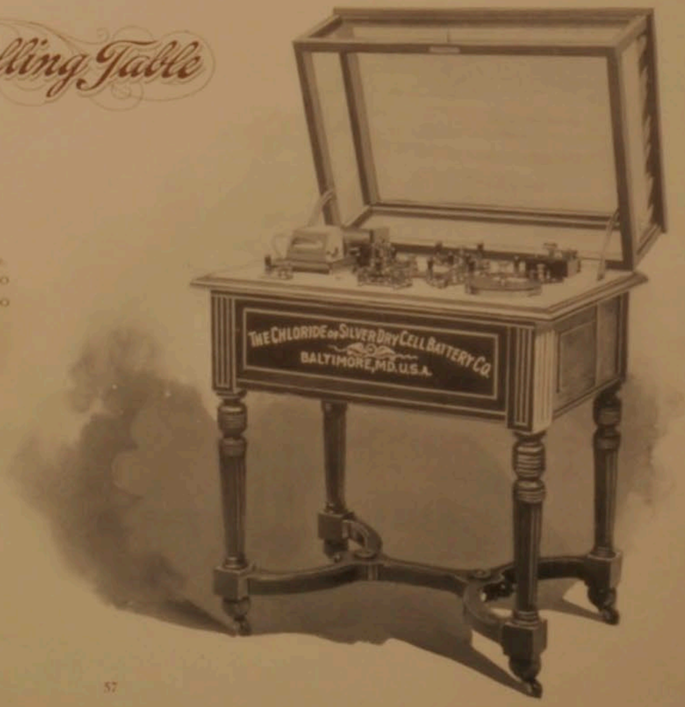
Current Reverser, for convenience in changing the polarity.

Current Breaker, for diagnostic purposes.

Contact Key, for starting the Faradic current.

Prices include also: Pair silk covered conducting cords, pair sponge electrodes No. 37, hard rubber plain handle, hard rubber interrupting handle, nut wrench for removing cells, plugs for testing cells, and screw driver.

Hospital Ward Rolling Table


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

Dimensions, 37½x29¼x20½ inches.

PRICE LIST.

Code.		Net Price.
Gold	— 50-cell Hospital Ward Rolling Table,	$150.00
Golden	—100-cell Hospital Ward Rolling Table,	200.00

(The name of the Company, as shown in illustration, does not appear on the Cabinet.)

ELECTRODES AND ACCESSORIES

Our claim that we produce only the highest grade of manufacture asserts itself in no department more than in that of Electrodes. Recognizing that with these various applicators of the mild electric current rests the responsibility of assured results, only the best grade of material, the most skilled and careful workmanship, followed by the finest and most endurable finish, are allowed.

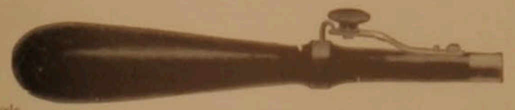
Character and size of the Electrodes are prominent factors in determining therapeutic effect, as upon these depend density and resistance, the character and effect of the current, and these points should always be noted for purposes of record and comparison.

Our instruments are the result of the long experience of prominent electro-therapeutists, whose advice has been followed at all times in further improving their utility.

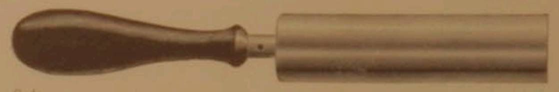
We desire to call special attention to our newly devised mono-polar and bi-polar Vaginal Applicators, as being constructed on a new principle, original with ourselves. Also to the Block Tin Electrodes, three sizes, for chemical electrolysis of the urethra. These same sizes and shapes are also furnished in Rolled Zinc or in Copper.

All Electrodes of our make, whether wholly of one piece or of various parts, are so accurately constructed as to preclude any possibility of collecting germs in the joints. They may be readily cleaned, and, if desired, may be anticepticized without fear of injury.

A great variety of efficient Electrodes is to be found here described, each serving its special purpose, and the practitioner will soon discover which he most needs. However, we hold ourselves in readiness to construct any Electrode the physician may demand, not listed in this catalogue.

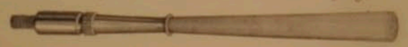


Code.
Fable —No. 8. Hard Rubber Handle (Universal), with Current Breaker $1.50
Fabric—No. 10. Ebonized Handle, with Current Breaker . . .75

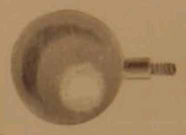


Code.
Face —Ebonized Handles and Nickel Plated Canulas, per set of 2 Handles and 2 Canulas $1.00
Facing—No. 6. Ebonized Handles, each 25
Fact —No. 7. Nickel Plated Canulas, each 25

Code.
Fade—No. 9. Ebonized Plain Handle . $ .50



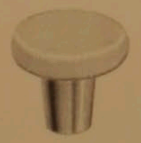
Code.
Flute—No. 47. Metallic Scourge . . . . $ .75



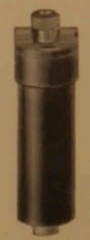
Code.
Flyer—No. 42. Metal Ball Electrode . . . . . $ .75

Code.			Per Pair
Fadge	—No. 12. Silk Conducting Cords,	10 ft. .	$1.25
Fag	— " "	8 ft. .	1.00
Fagot	— " "	5 ft. .	.75
Fail	— " "	3 ft. .	.65
Faint	—No. 4. Cotton Conducting Cords,	3 ft. .	.60

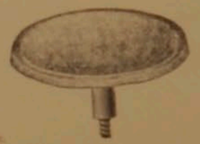
Code.
Fair—No. 5. Silk Selecting Cords used in No. 1 Galvanic Battery, per pair $1.00



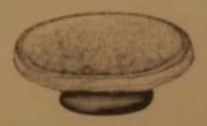
Code.
Faith—No. 88. Carbon Electrode, flannel covered, per pair . . . . $ .50



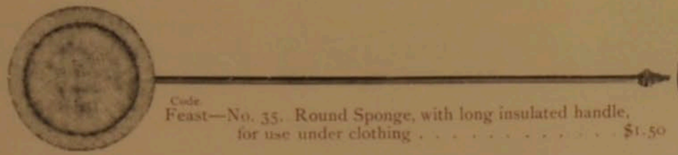
Code.
Fame—No. 11. Hard Rubber Water Rheostat, $1.50



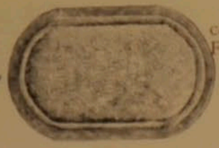
Code.
Fall—No. 37. Sponge Electrode, rubber back, without handles (male or female thread) each $ .50



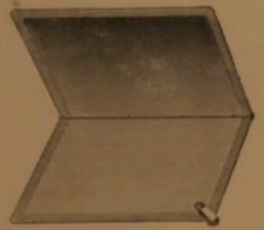
Code.
Faller—No. 36. Sponge Electrode, with door-knob handles, each . $ .50



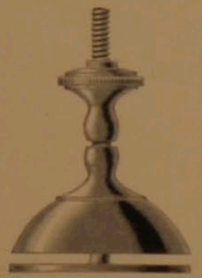
Code.
Feast—No. 35. Round Sponge, with long insulated handle, for use under clothing $1.50



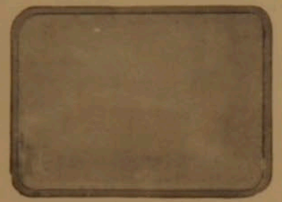
Code.
Fear—No. 34. Oval Sponge, soft rubber back, for direct application with hand $1.50



Code.
Feeler—No. 31. Foot Plate, folding, flannel lining and rubber insulation $4.00

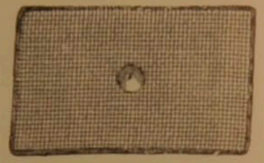


Code.
Foal—No. 28. Universal Sponge Holder . $1.50



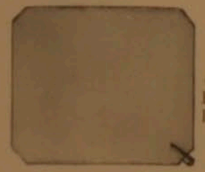
No. 85. Felt Covered Electrodes, with soft rubber back, *six sizes.*

Code.			
Famous—Size	1,	3¼x2¾ in.,	$ .50
Fancy — "	2,	4¾x3½ in.,	.60
Fang — "	3,	5½x3¾ in.,	.75
Far — "	4,	7 x5 in.,	.90
Farce — "	5,	8 x5¾ in.,	1.00
Farmer — "	6,	9 x6½ in.,	1.25

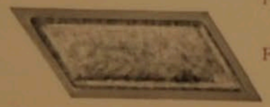


No. 13. Wire Gauze Electrodes.

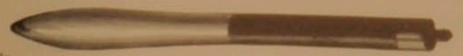
Code.		
Fashion—Size	3x 4 inches	$ .50
Fast — "	4x 5 "	.60
Fasten — "	4x 6 "	.70
Fat — "	5x 7 "	.80
Fatter — "	6x 8 "	.90
Fathom— "	6x12 "	1.00
Favor — "	8x10 "	1.10
Fawn — "	8x12 "	1.25



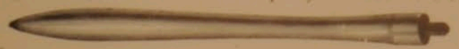
Code.
Feed—No. 29. Foot Plate, zinc $ .50
Few —No. 30. Foot Plate, copper, nickel plated . . 1.00



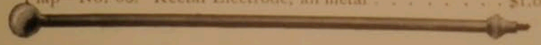
Code.
Fellow—No. 38. Sponge Electrode, rubber back, rectangular, 3x5 in., each $1.50
Fence —No. 39. Sponge Electrode, rubber back, rectangular, 2x4 in., each 1.00



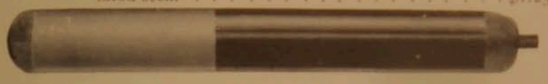
Code.
Flange—No. 59. Rectal Electrode, partly insulated $2.00



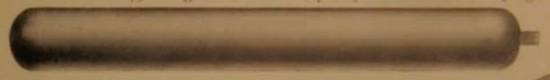
Code.
Flap—No. 60. Rectal Electrode, all metal $1.00



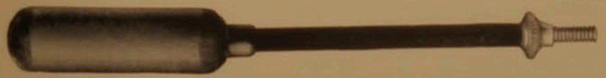
Code.
Flash—No. 63. Rectal Electrode, with ball and long insulated stem $1.25



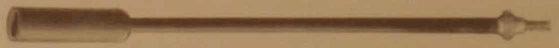
Code.
Fervid—No. 49. Vaginal Electrode, partly insulated . . . $2.50



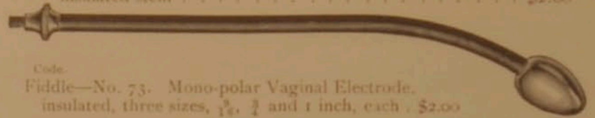
Code.
Fetch—No. 50. Vaginal Electrode, large, all metal . . $1.25
Fiat —No. 50. Vaginal Electrode, small, all metal . 1.25



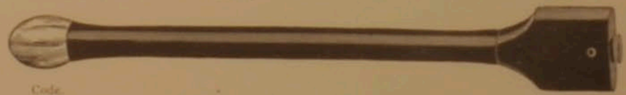
Code.
Fib —No. 51. Vaginal Electrode, large, cylindrical tip and insulated stem, complete $2.00
Fibre—No. 51. Vaginal Electrode, small, cylindrical tip and insulated stem, complete 2.00



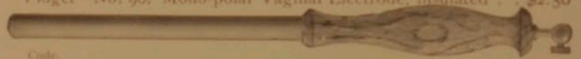
Code.
Fickle—No. 72. Vaginal and Os Uteri Combination Electrode, insulated stem $2.00



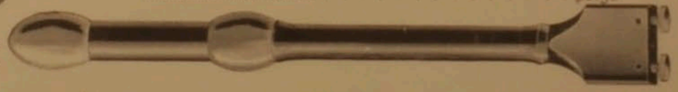
Code.
Fiddle—No. 73. Mono-polar Vaginal Electrode, insulated, three sizes, $\frac{5}{16}$, $\frac{3}{4}$ and 1 inch, each . $2.00



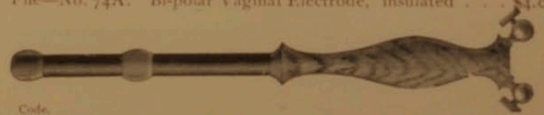
Code.
Fidget—No. 90. Mono-polar Vaginal Electrode, insulated . . $2.50



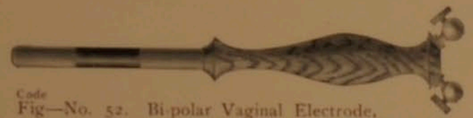
Code.
Field—No. 86. Mono-polar Vaginal Electrode, with finely polished insulated handle $2.50



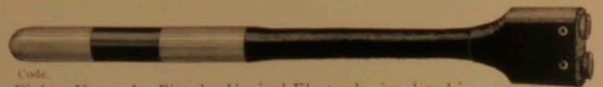
Code.
Fife—No. 74A. Bi-polar Vaginal Electrode, insulated . . . $4.00



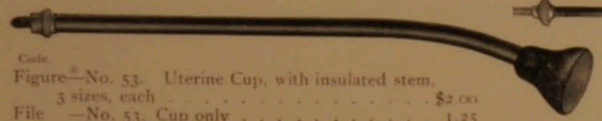
Code.
Fierce—No. 74. Bi-polar Vaginal Electrode, insulated . . . $4.00



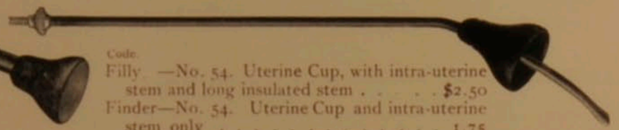
Code
Fig—No. 52. Bi-polar Vaginal Electrode, insulated in center $4.00



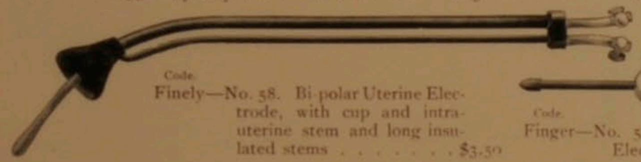
Code
Fight—No. 52A. Bi-polar Vaginal Electrode, insulated in center $4.00



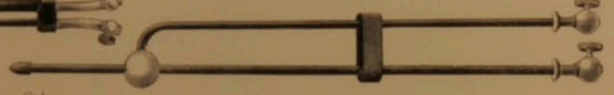
Code
Figure*—No. 53. Uterine Cup, with insulated stem. 3 sizes, each $2.00
File —No. 53. Cup only 1.25



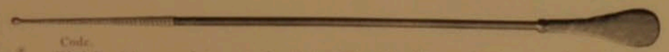
Code
Filly —No. 54. Uterine Cup, with intra-uterine stem and long insulated stem $2.50
Finder—No. 54. Uterine Cup and intra-uterine stem only 1.75



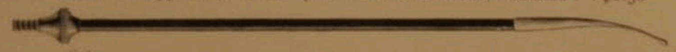
Code
Finely—No. 58. Bi-polar Uterine Electrode, with cup and intra-uterine stem and long insulated stems $3.50



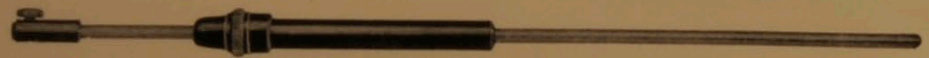
Code
Finger—No. 57. Bi-polar Intra-uterine and Extra-uterine Adjustable Electrode, insulated $3.00



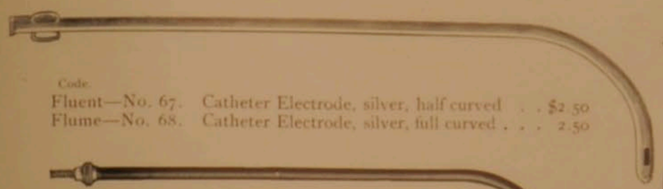
Code
Finish—No. 55. Intra-uterine Spiral Flexible Electrode, insulated . . $2.50



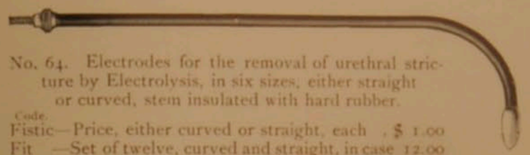
Code
Fired—No. 43. Intra-uterine Inflexible Electrode, insulated . . . $1 50



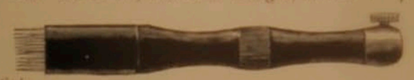
No. 93. Intra-uterine or Sound Electrode, for chemical electrolysis, made of either block tin, zinc or copper, in three sizes.
Code
Fish —Price, per set of three, including rubber muff for each, in neat case $6.00
Fisher—Price of one, with rubber muff 2.00



Code
Fluent—No. 67. Catheter Electrode, silver, half curved . . $2.50
Flume—No. 68. Catheter Electrode, silver, full curved . . . 2.50



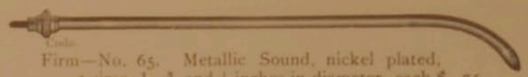
No. 64. Electrodes for the removal of urethral stricture by Electrolysis, in six sizes, either straight or curved, stem insulated with hard rubber.
Code
Fistic—Price, either curved or straight, each . $ 1.00
Fit —Set of twelve, curved and straight, in case 12.00
Fitful—Set of six, curved or straight, in case . 7.00



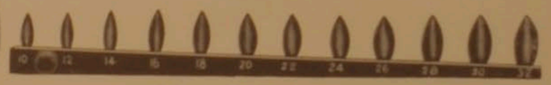
Code
Flush—No. 26. Needle Holder for removing port wine marks $5.00

No. 40. Cabinet Flat Sponge Electrodes.
Code
From—Size 4½x4½ $2.00
Front—Size 5¼x3¾ 2.00
Frost—Size 4½x2½ 1.10
Frou —Size 2¼x2 50
Froze—Size 1⅝x1½ 50

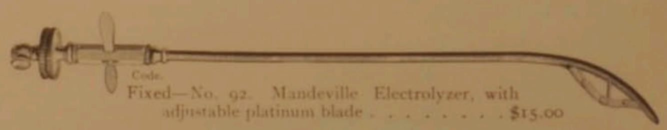
Code
Frame—No. 89. Self-holding Lens, for use in removing superfluous hair $1.50
(Illustrated on page 16.)



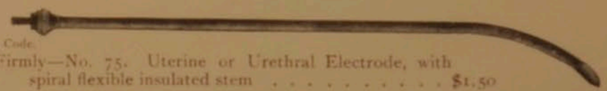
Code
Firm—No. 65. Metallic Sound, nickel plated, 3 sizes, $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$ inches in diameter, each $ .75



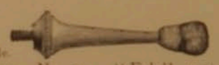
Code
Flabby—No. 76. One dozen assorted Olives, with insulated stem, curved or straight $3.50
Flag —No. 76. One dozen assorted Olives, without insulated stem 2.50
Flake —No. 56. Assorted Olives, round or pointed, each . .20



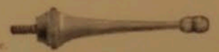
Code
Fixed—No. 92. Mandeville Electrolyzer, with adjustable platinum blade $15.00



Code
Firmly—No. 75. Uterine or Urethral Electrode, with spiral flexible insulated stem $1.50

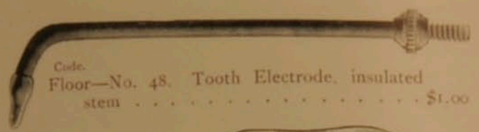


Code
Flatus—No 79. "Erb" pattern Electrode, sponge tipped, large $ .50



Code
Flavor—No. 80. "Erb" pattern Electrode, sponge tipped, small $ .50

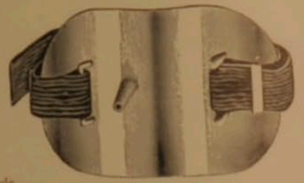
Code.
Ferry—No. 46. Hair Brush Electrode $2.00



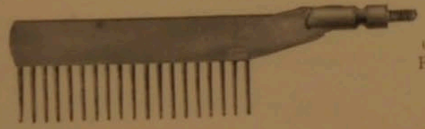
Code.
Floor—No. 48. Tooth Electrode, insulated stem $1.00

Code.
Fly—No. 91. Stomach or Gastric Electrode . . . $2.00

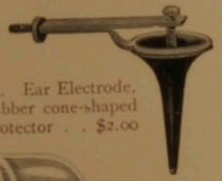
Code.
Fluff—No. 25. Disc Rheophore, with insulated metal points . . . $ .50



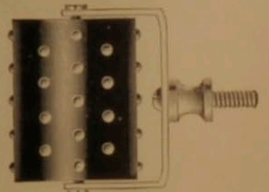
Code.
Force—No. 32. Wrist and Neckband Electrode $1.50



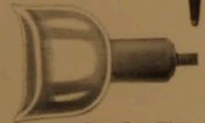
Code.
Flurry—No. 44. Comb Electrode, seven points, small . . $1.00
Flux —No. 45. Comb Electrode, long 1.50



Code.
Floral—No. 17. Ear Electrode, with hard rubber cone-shaped insulating protector . . $2.00



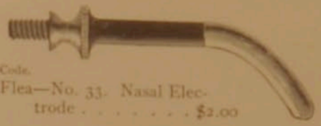
Code.
Floss—No. 27. Rolling Rheophore, or Wheel Electrode, with insulated metal points and No. 8 Universal Interrupting Handle . . . $3.50
Flower—Without handle . 2.00



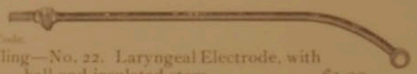
Code.
Flaw—No. 14. Eye Cup Electrode, to be filled with water . . . $2.00

Code.
Flatly—No. 15. Small Eye Electrode, with stem $1.00

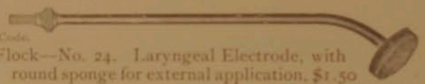
Code.
Fledge—No. 21. Tongue Plate, with insulated stem $1.00



Code.
Flea—No. 33. Nasal Electrode $2.00

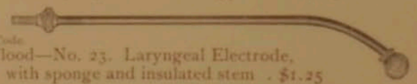


Code.
Fling—No. 22. Laryngeal Electrode, with ball and insulated stem $1.00



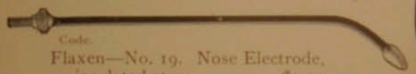
Code.
Flock—No. 24. Laryngeal Electrode, with round sponge for external application, $1.50

Code.
Fleece—No. 20. Tonsil Electrode, with stem and ball $1.00



Code.
Flood—No. 23. Laryngeal Electrode, with sponge and insulated stem . $1.25

Code.
Fleck—No. 18. Ear Electrode, double, with sponge tips . . . $2.00



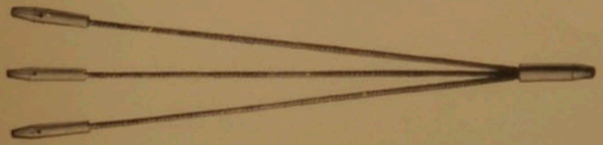
Code.
Flaxen—No. 19. Nose Electrode, insulated stem $1.00

Code.
Formal—No. 78. Needle Holder, polished hard rubber, with nickel plated metal parts, and interrupter $1.50

Code.
Flayed—No. 16. Ear and Nose Electrode, straight . . . . $ .75

Code.
Forbid—No. 78A. Needle Holder, polished hard rubber, with nickel plated metal parts, without interrupter $1.50

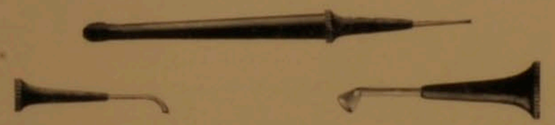
Code.
Force—No. 78B. Needle Holder, to hold Broach Needles, with or without interrupter $1.50



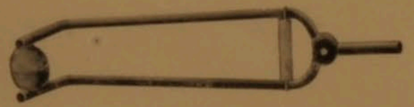
Code.
Fold—No. 70. Needle Holders, with cord and tips, to hold 1, 2, 3, 4, 5, or 6 needles. Price, without needles, $ .60, $1.00, $1.25, $1.50, $1.75, $2.00.

Code.
Follow—No. 71. "Chisholm's" Needle Holder, ivory handle; used in removing hair. (We claim this to be the most elegant and convenient holder of the kind in use.) With six needles . . $4 50

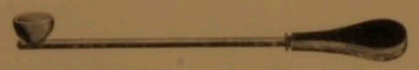
ELECTRODES FOR DENTAL CATAPHORESIS



Code.		
Flight	—Applicator Handle, with straight and curved platinum applicators, complete	$5.00
Flint	—No. 202. Platinum Applicator, straight point	2.00
Float	—No. 203. Platinum Applicator, curved point	2.00
Foam	—No. 204. Platinum Applicator, tubular point	2.50
Fond	—No. 201. Applicator Handle	1.00



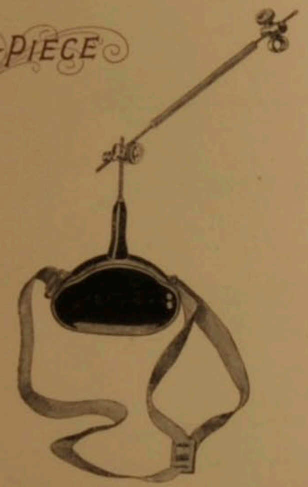
Code.		
Frost	—No. 205. Double Cup Electrode, with soft rubber cups	$3.00



Code.		
Fruit	—No. 206. Single Cup Electrode, with soft rubber cup	$1.50

This attachment was made to meet the demand of the profession for some better method of adjusting Applicators, and to insure a perfect contact at all times after Applicator is adjusted.

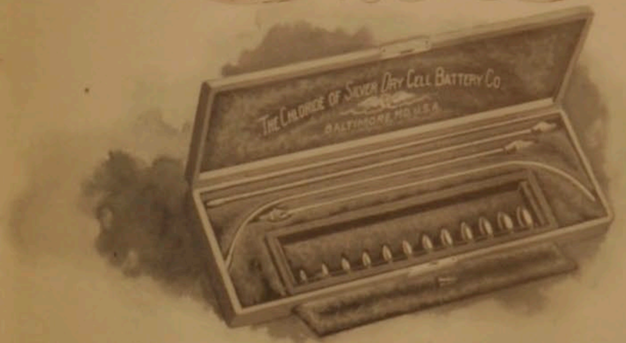
CHIN-PIECE



Code.		
Fuse	—No. 207. Chin Piece, for adjusting Applicators to any position in mouth	$3.50

With hard rubber cup, two compound joints and flexible spring for adjusting the Applicator to any position whatsoever in the mouth.

GENITO-URINARY ELECTRODE CASE

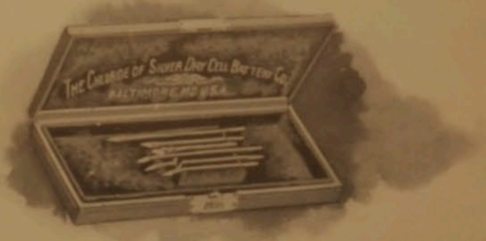

THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

Code.		
Fugue	—No. 87. Genito-Urinary Electrode Case	$7.00

(Case contains nickel-plated metallic Sound, flexible and inflexible Urethral Electrode, and one dozen assorted Olives, numbered from 10 to 32, French scale. Case is velvet lined, 12 inches long by 3½ inches wide.)

NEEDLE CASES

Code.		
Froth	—No. 81. Needle Case, containing three gold-plated insulated needles for electrolysis	$4.75
Frown	—(Including No. 70 Needle Holder for one needle)	5.25
Froze	—(Including No. 70 Needle Holder for two needles)	5.75
Frugal	—(Including No. 70 Needle Holder for three needles)	6.00
Fruity	—No. 82. Needle Case, containing six gold-plated insulated needles for electrolysis	8.25
Fry	—(Including No. 70 Needle Holder for one needle)	8.75
Fryer	—(Including No. 70 Needle Holder for two needles)	9.25
Fuel	—(Including No. 70 Needle Holder for three needles)	9.50


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD. U.S.A.

NEEDLES

Code.		
Force	—No. 69. Gold plated Needles for electrolysis, insulated with hard rubber, each [Our Gold-plated insulated Needles are very superior in quality.]	$1.25
Fork	—No. 83. Steel Needles for removing hair, each	.10
Foster	—No. 83. Steel Needles for removing hair, per dozen	1.00
Found	—No. 84. Iridio-Platinum Needles for removing hair, each	.40

Eureka, Cal.

Some twenty months ago I obtained your Chloride of Silver, No. 11, Galvanic Battery, and must say that it has given complete satisfaction.

Yours respectfully, JOHN J. GAYNOR, M.D.

St. Thomas, Ont.

I received your instrument all O K. Used it to-day with splendid success. Have removed live and inflamed pulps painlessly, and bleached a tooth which had been dark for ten years (with pyrozone).

Sincerely yours, J. J. TEETZEL, L.D.S.

Worcester, Mass.

At present I have two of your Chloride of Silver Dry Cell Batteries in constant use, and consider them the best and most reliable Batteries on the market. To me they are more than satisfactory.

Very truly yours, C. W. WHITAKER, M.D.

Baltimore, Md.

Gentlemen:—I have made use of your Chloride of Silver Battery. I have never had an instrument to give me the same amount of satisfaction as this has done; to me it appears perfect, always ready for service, and when you connect a certain number of cells you are absolutely certain of the power that is being transmitted to your patient. For Gynæcological work it is unsurpassed by any battery that I have ever made use of. I use it every day for Electrolytic work, and find it to be absolutely reliable. Wishing you continued success in your enterprise, I am,

Very truly yours, WM. A. B. SELLMAN, M.D.,
Professor of "Diseases of Women,"
Baltimore University S. Med.

Baltimore, Md.

Dear Sirs:—I have used two Chloride of Silver Batteries. The first was a private battery of a patient with whom I traveled around the world. The Battery was always in perfect order, and in almost daily use until, being mistaken for an infernal machine, it was captured by the Russians at Warsaw. My present battery has been with me across the Atlantic and back, and has had several bad falls; once from a car in motion. It has been applied frequently, and with much success, and has been found always in good working order. The advantages it possesses over other galvanic batteries are its portability and constant readiness for use.

Very truly yours,
1 W. Biddle Street. NATHAN R. GORTER, M.D.

Chicago, Ill.

Dear Sirs:—Your superb No. 11 Galvanic arrived with the new blocks for the Faradic, for which accept my sincere thanks. I can now redouble my efforts in presenting to physicians and medical students the advantages of your inimitable apparatus. I am always being asked to give clinics in electro-diagnosis, and have promised one at each of several hospitals, when I shall use only your apparatus.

Yours sincerely, S. V. CLEVENGER, M.D.

Mexico, Mo.

Immediately on receipt of your second edition on Cataphoresis, I bought your outfit, and have been very much pleased with it. I also sent to you and got the chin-piece. I would not like to practice dentistry without an outfit for Cataphoresis, and am convinced that yours is the best that is manufactured

Yours truly, W. L. REED, D.D.S.

Quincy, Mass.

I have been using one of your 50-Cell Batteries for the past six years, with only one renewal of cells.

Yours truly, J. A. GORDON, M.D.

Astoria, Ore.

I have one of your 35-Cell, No. 11 Galvanic Batteries which is giving me good satisfaction.

Very respectfully yours, DR. JAY TUTTLE.

Osceola, Iowa.

I am using one of your Chloride of Silver Dry Cell Batteries, and like it better than any battery I ever used in my life, and I have worn out some three or four other batteries.

JASON ROBERTS, M.D.

Brockton, Mass.

Thanking you for the catalogue, I will say that I have been using your Battery for two years with unvarying success. Wishing soon to order a good constant current battery, I sent for a new catalogue.

Yours most truly, J. S. DYER, M.D.

Springfield, Mass.

I have one of your Chloride of Silver Dry Cell Batteries, No. 14, purchased in Boston. I am well pleased with it, and think I shall always prefer it to all other batteries.

Yours, etc., O. W. ROBERTS, M.D.

AUTOMATIC RHEOTOME

The Automatic Rheotome is unquestionably one of the most valuable factors in current variation, and its introduction has greatly enlarged the range and utility of both the Faradic and Galvanic currents. The Faradic battery is always provided with the ordinary vibrator—or buzzer, as it is commonly called, intensity of which is increased or lessened by changes of the coil or battery strength ; but it has become advisable to obtain a variation of interruptions for diagnosis, as well as for the treatment of muscular troubles, paralysis, etc., when either the Galvanic or Faradic current is employed. The Automatic Rheotome as constructed by us commends itself in such cases. With clock-like regularity, it can be adjusted to interrupt the current from six to nine hundred times per minute. It is encased in highly polished hard rubber, and is mounted on a base of similar material. Its construction is most accurate and durable.

Price, in a neat case $10.00

ELECTRO-MAGNET

The Electro-Magnet has become an indispensable adjunct to the outfit of every surgeon and oculist, for accidents, such as the deposition of small particles of iron or steel in the eye. When bits of iron or steel have penetrated the posterior chamber of an eye it is almost impossible to remove them with ordinary instruments. In such cases the value of the Electro-Magnet is manifest, for with its assistance the offending particle can be quickly removed.

Our improvements have made it of real value to the profession. The foremost objection to the original patterns lay in the compulsory use of the wet cell, which usually was not in condition for service, thus preventing the use of the magnet when prompt action was imperative. Our type of magnet is always ready for immediate use, being supplied with the Chloride of Silver Dry Cells. Simply connect the conducting cords and press the contact spring, when the style at the end is immediately transformed into a powerful magnet of such attraction as to render the removal of the troublesome particle from the eye the work of a moment. The apparatus is neatly constructed in a mahogany case, is very light in weight, and of a form that may be carried in the pocket, if occasion requires.

Price of Electro-Magnet, with battery and cords, contained
in a neat case $15.00

TESTIMONIALS

New York, N. Y.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO.

Gentlemen :—It is seldom that we feel justified in recommending any article not of our manufacture, but we can safely make an exception in favor of your Chloride of Silver Dry Cell Batteries.

These Batteries have been handled by us since they were first put upon the market, and we have sold over 1500 of them ; nearly 200 of these of 50 cells or more each, and as they have given satisfaction we recommend them to all intending purchasers of batteries.

Yours respectfully, GEO. TIEMANN & CO.

St. Paul, Minn.

Gentlemen :—We have handled the Chloride of Silver Batteries from their early start, and have since sold many thousand dollars' worth of them. We think, for a portable battery, it is the best made ; in fact, we do not consider any other make of portable battery compares with it. For those who want such a battery, we recommend it before all other makes we handle.

Yours sincerely, NOYES BROS & CUTLER,
A. B. BRAND, Manager Surgical Instrument Dept.

San Francisco, Cal.

Kindly permit us to congratulate you with reference to the great improvements made of late on the Chloride of Silver Dry Cell Batteries; particularly the different Faradic instruments, in our opinion, cannot be excelled. For neatness, cleanliness and portability, both have no equal. The Galvanic Battery for Cataphoric work certainly proves to be very satisfactory.

Yours most respectfully, J. H. A. FOLKERS & BRO.

Memphis, Tenn.

We beg to inform you that we have sold more of your instruments than all others now on the market in our territory, and they have given universal satisfaction. It is a great pleasure to sell your goods, and we shall continue to do so as long as their high standard is maintained.

Yours very truly, DUTRO & HEWITT.

Philadelphia, Penna.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO., Baltimore, Maryland.

Dear Sirs :—As we have handled your Batteries for over four years, we thought in justice to yourselves to inform you that we have had such success with your goods that we hardly sell any other than the Chloride of Silver Dry Cell Batteries.

We find that the Physicians have long ago desired some substitute for the old style fluid Batteries which were a constant source of annoyance, and we have no trouble in effecting a sale of your goods in comparison with the old style fluid batteries.

We now carry a full line of your goods and find the sale of them is constantly increasing. As mentioned to you personally, the many advantages contained in your Battery, such as compactness, cleanliness, and their constant current, are no doubt points which are working in their favor.

Respectfully yours, CHAS. LENTZ & SONS.

Cincinnati, Ohio.

We have sold most every kind of medical batteries, and do not hesitate in recommending the Chloride of Silver Dry Cell Batteries for their high standard of quality and finish. In selling same we are fully convinced that they will be satisfactory in the hands of the user, cost less for repairs, are always ready for use, and far superior to the old style batteries.

Yours truly, MAX WOCHER & SON.

Iowa City, Iowa.

I purchased a Galvanic Battery of your make some six months ago. I have been using it in my practice since, and say that it has given me entire satisfaction so far. I am delighted with the Willms Dry Current Controller. It produces no shock to patients and is a great improvement over the other methods that I have previously used.

Truly yours, J. C. SHRADER, A.M., M.D., LL.D.,
Professor of Obstetrics and Gynæcology, Medical Dept.,
State University of Iowa.

Providence, R. I.

Gentlemen:—We are very glad to testify to the high character and efficacy of the Electrical Batteries manufactured by your company, which, though considered quite perfect at the time of their introduction some years ago, have been steadily improved upon until at the present time there seems to be little room for further perfection. We introduced them among our customers, and to-day our books show sales during the past six years amounting to more than double that of all other styles of Batteries ever sold by us during the same length of time at any period of our business. The superior workmanship, and, as we may say, almost perfect arrangement of the present Batteries, recommend them to any one desiring an Electrical Instrument.

Yours very truly, OTIS CLAPP & SON.

New Orleans, La.

All patrons to whom I have sold your Batteries give them their unqualified endorsement. These are the most satisfactory goods of the kind I have ever carried in stock, being compact, cleanly, finely finished in every respect, and thoroughly reliable. My professional friends are delighted with the Chloride of Silver Batteries, and are pleased to explain their many advantages to intending purchasers. No recommendation can be too strong in their favor.

Very truly yours, AUG. C. FREITAG.

Washington, D. C.

We have been handling your Batteries for several years, and in that time have sold a large number of them, and as far as we know they have given excellent satisfaction. Nearly all our business in your goods has been in Faradic Batteries, and these are particularly well spoken of by our customers.

Yours respectfully, Z. D. GILMAN.

Chicago, Ill.

We desire to state for the Chloride of Silver Dry Cell Medical Batteries, that the physicians to whom we have sold these instruments are using them with entire satisfaction and expressions of approval.

Yours very truly SHARP & SMITH.

St. Louis, Mo.

We have handled your Batteries for a number of years, and they have always given perfect satisfaction; in fact, in our opinion, in the recent improvements you have made on same, you have obtained the height of perfection in the manufacture of Batteries.

Yours very truly, A. S. ALOE CO.

Indianapolis, Ind.

I take pleasure in recommending your Batteries and Instruments to our students and all desiring Electro Therapeutic supplies. I have used several of your Batteries, and they have invariably given complete satisfaction. I consider your Faradic Batteries as particularly desirable, containing a very excellent coil, and being the most portable and convenient Battery upon the market. I have used, perhaps, eight or ten of your Milliampere Meters in my office work, and have always found them thoroughly accurate. The Willms Current Controller I have in daily use, and could not think of substituting any other rheostat or controller for it. I have found that all of your goods were of the best possible finish and workmanship, and have never been disappointed in anything purchased from you.

Respectfully and cordially yours, WM. F. HOWE,

Pres't Nat College of Electro Therapeutics.

TAKEN FROM THE APRIL, 1897, NUMBER OF THE *Medical Brief.*

"I desire to express my thanks to the *Medical Brief*, as it was the means of my being induced to order through you, the Physician's Special Combination Galvanic and Faradic Dry Cell Battery, No. 13, of the Chloride of Silver Dry Cell Battery Co., of Baltimore, Maryland. I use it daily in my treatment for the cure of hernia, and must say am delighted with it."

Besides being a model of mechanical skill, it is durable, clean, compact, and meets the requirements for which it is intended. In medical work the Dry Cell Battery has surely superseded all fluid batteries.

W. E. WOOD, M.D.

328 Odd Fellows Building, St. Louis, Mo.

FROM ARTICLE BY DR. A. H. P. LEUF, IN NOVEMBER, 1896,
NUMBER OF *Medical Council.*

"In my estimation the Chloride of Silver Dry Cell is the best in the market, improving rather than deteriorating with age when unused, and having a uniform current during its entire existence, so that that which it emits during the last five minutes of its life is the same as that given off the first day it was in use. The net cost of renewal is also very small in these cells, inasmuch as the major portion of the purchase price of new ones is allowed for old ones. I have had in almost constant use for nine and a half years a Chloride of Silver 50-Cell Galvanic Battery obtained of its inventor and maker. Every cell in that Battery to-day yields a uniform current, and not a single one has ever been replenished or even detached in all that time. The Dry Cell is more compact, and hence more portable; is less troublesome to remove, and is interchangeable with facility. I advise all intending purchasers to write for illustrated price-lists to the Chloride of Silver Dry Cell Battery Co., Baltimore, Maryland."

Atlanta, Ga.

The Urethral Electrodes you sent me are very satisfactory. I have used one of your No. 13 Batteries for a year with great satisfaction. It is as near perfect as a battery could be.

Truly yours, S. G. COURTNEY PINCKNEY, M.D.

Baja, California, Mexico.

I have been using one of your Batteries steadily for over a year and a half, and never had more satisfaction out of any other battery purchased in a practice of thirty years. I have carried it on horse back, and over precipitous mountain roads, which wore me out but never affected the battery.

Very sincerely yours, DR. L. GOLDSCHMIEDT.

---

204 Manchester St., Christchurch, New Zealand.

Having used your No. 14 Faradic Battery for sometime with satisfaction, it is my wish to possess a second Battery with the latest improvements. You will be good enough to forward one to my order as early as you can.

Yours sincerely, CHARLES JAMES RUSSELL, M.D.

La Grange, Texas.

I bought one of your Batteries directly after you sent me the catalogue, and am very well pleased with it. I like it better than any other battery I have ever seen.

Yours respectfully, O. A. HUNGER, M.D.

Shelbyville, Ind.

I have only had the outfit purchased of you about a week, but the results are far beyond my expectations. I have tried it on sensitive teeth for many people, and the drilling of the teeth was absolutely painless. I am delighted with it and would not take a thousand dollars for it and do without it in my practice. Believe me an enthusiast in the Chloride of Silver Dry Cell outfit.

Yours truly, H. C. SEXTON, D.D.S.

Greenville, Texas.

I have your No. 14 Faradic and No. 1 Galvanic Batteries. Have used your Chloride of Silver Dry Cell Batteries for the last ten years, and greatly perfer them to any others. If I ever have need to purchase a family battery, I shall always recommend yours as the kind that has given me best satisfaction.

Yours very truly, E. G. COCHRAN, M.D.

Richmond, Va.

For some years I have been using your 24-Cell Battery with pleasure and profit. I greatly prefer your Batteries and always express that preference, while others order and purchase the less satisfactory and cheaper articles.

Very respectfully, WM. B. GRAY, M.D.

Mt. Airy, Md.

At my suggestion, one of my patients purchased one of your Chloride of Silver Dry Cell Batteries. It has been in constant use, and I am pleased to add my testimonial to the many others, of its perfectness in every particular.

Very truly yours, B. H. TODD, M.D.

Marksville, La.

I have purchased three of your Chloride of Silver Dry Cell Batteries, and all are doing their work satisfactorily. Two of them have been in use nearly five years. I have induced other medical men to use your Batteries, and all are equally pleased.

Yours truly, A. E. ARNOLD, M.D.

Holyoke, Mass.

Sometime ago I purchased one of your Chloride of Silver Dry Cell Batteries, and liked it so well that I have since purchased another of the same kind.

Very respectfully, C. A. ALLEN, M.D.

Portland, Me.

It gives me pleasure to say that the Chloride of Silver Combination Galvanic and Faradic Battery, No. 13, which I bought of you two years ago has given perfect satisfaction, and leaves nothing to be desired so far as the use of the two currents is concerned. I would consider it a great nuisance to be obliged to return to the use of the old fluid batteries, which are so liable to fail when they are most needed, not to speak of the care they require, their untidiness etc., etc. Compared with dry cells, they are a relic of barbarism.

Cordially yours, MAURICE F. PILGRIM, M.D.

Paducah, Ky.

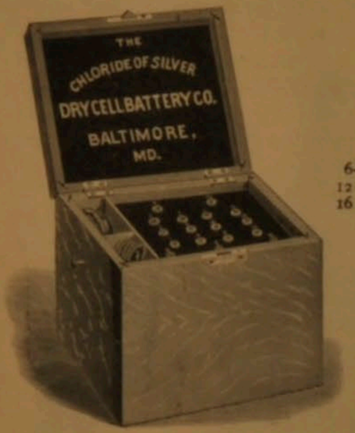
My Chloride of Silver Dry Cell Battery works to perfection. I would not be without the outfit; and no progressive dentist should be.

Yours, etc., W. H. PITCHER, D.D.S.

Pres't Western Ky. Dental Association.

No. 3.—GALVANIC BATTERY.

This is a smaller and less complete constant-current Battery than the No. 1 and is intended for family as well as physician's use, for electrolysis of small growths, hairs, &c.; in general, for the treatment of cases which do not need or could not stand a very powerful current. Put up in strong, well-finished walnut boxes, with conducting cords and sponge electrodes.



6-Cell;	size 4½x4½x5....	Price,	$10.00
12 "	" 5½x5½x5....	"	15.00
16 "	" 5½x5½x5....	"	20.00

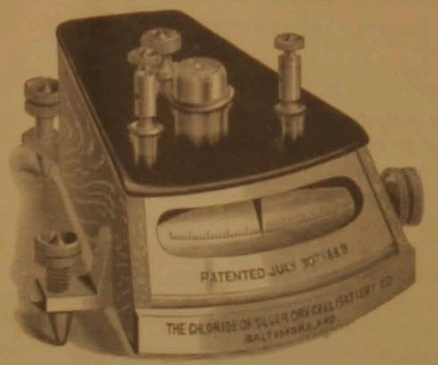
No. 3.

These Batteries will maintain the full strength of current for about 720 hours of actual work. The cost of operating the 6-Cell Battery is one-quarter of a cent per hour. That of the others is in exact proportion, according to the number of cells.

Charge for Renewing and Restoring, 30 cents per Cell.

CHLORIDE OF SILVER DRY CELL BATTERIES

are made by this Company solely and in Baltimore only.


PATENTED JULY
THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
BALTIMORE, MD.

No. 4.—MIL-AM-METER. Price, $30.00.

Without discussing the question of the usefulness of this instrument in connection with medical galvanism—which seems as uncalled-for as to try to demonstrate the usefulness of the apothecary's scales in the administration of doses of other medicine—it will be sufficient to describe the peculiar merits of our present improved form of meter and its adaptability to the service of the physician.

Experience has demonstrated to us just what are the desirable features to be embodied in an instrument of this kind, as will be recognized from the following—

First—An absolute electrical meter should be *accurate*. The best conditions for this accuracy are the use of short magnetic needles in connection with a long pointer. In our meter the magnetic needles are less than one inch long, while the pointer—made of aluminum for lightness—is four inches long, thus securing an extended indication on the scale for a very slight movement of the needles.

Second—Such a meter should be as free as possible from changes due to changes of time and surroundings. This double object we accomplish by employing a horizontal movement and an astatic system of magnetic needles, controlled by a fixed magnet, which is permanently under the influence of an armature or keeper, for preserving a uniform degree of magnetism. Such a system of needles is free from the influence of the earth's magnetism and is the most constant in its action.

Third—Friction must be entirely absent. This we accomplish by the use of a perfectly-pointed steel pivot, working in a concave jewel, as in the best absolute galvanometers known to electricity.

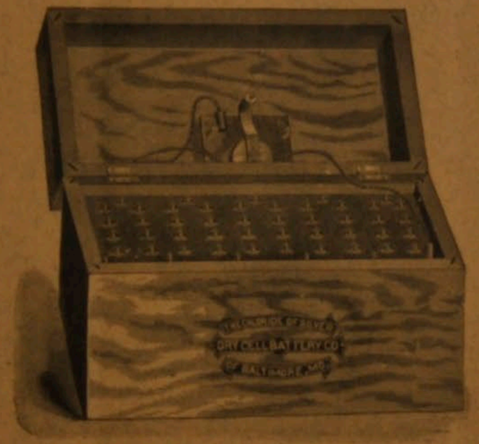
Fourth—The free parts of the instrument must be provided against accidental displacement. This is attained by a simple detail of mechanism, so that the magnetic needles cannot get off the pivot, even if shaken wrong-side-up or otherwise roughly used. A simple-locking device also provides for lifting the needles from the pivot and holding them fixed for transportation.

Fifth—A physician's Miliamperemeter should be readable from either a sitting or standing position. In our meter we pitch the face at the front at an angle which satisfactorily meets these points.

Descriptive Catalogue.

CHLORIDE OF SILVER DRY CELL

MEDICAL BATTERIES.


DRY CELL BATTERY CO.
BALTIMORE, MD.

FOR SALE BY

George Tiemann & Co.,

107 PARK ROW, - - NEW YORK.

Branch Store: STOHLMANN, PFARRE & Co., 107 E. 28th St., N. Y.

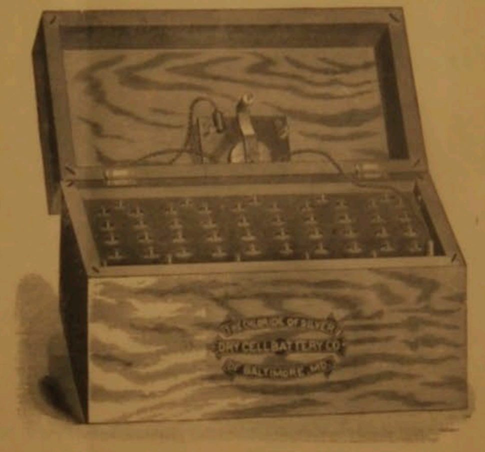
·Fourth·Edition·

Chloride of Silver Dry Cell Battery

Descriptive Catalogue.

CHLORIDE OF SILVER DRY CELL

MEDICAL BATTERIES.


CHLORIDE OF SILVER
DRY CELL BATTERY CO.
BALTIMORE, MD.

MANUFACTURED BY THE

Chloride of Silver Dry Cell Battery Co.

OF BALTIMORE CITY, MD.

• Fourth • Edition •

PREFACE.

The very high reputation which the Chloride of Silver Dry Cell Batteries had acquired and maintained as scientific practical apparatus, indispensable to the physician and surgeon as well; and a greatly increased demand for them whilst the last edition of the catalogue was yet in course of distribution, made apparent that greater manufacturing facilities would be needed in the near future.

Since then, the incorporation of the Chloride of Silver Dry Cell Battery Co. of Baltimore City, Maryland, has been effected, with offices and factories permanently located in Baltimore, in which city the manufacture of the Chloride of Silver Dry Cell Batteries is now and will hereafter be conducted.

The well-known commercial reputation and integrity of the gentlemen who now have the conduct of the enterprise in their care is ample guarantee that the researches which led to the development and perfection of the Chloride of Silver Dry Cell Batteries will be most earnestly followed up; and that nothing so far as it shall lie in the power of an ever-increasing knowledge, together with the highest attainable skill, will be left undone, to supply the Medical Profession at all times with the best and most approved electrical apparatus.

CHLORIDE OF SILVER DRY CELL BATTERY CO.
of Baltimore City, Md.

J. A. Pfarre, of George Tiemann & Co., President.
G. A. Liebig, Jr., Ph. D., Vice-President and Electrician.
Claude Van Bibber, M. D., Secretary.
John A. Barrett, of New York City, Consulting Electrician.
Charles Willms, of Charles Willms & Co., General Manager.

Notice.

In ordering Batteries and Electrodes from this Catalogue, it is sufficient to state catalogue number and price of article desired. All previous lists are superseded by this.

Every Battery and other electrical appliance sold by us is **warranted perfect** for the purpose intended, and each will be **carefully tested** before shipment to purchaser. However, no responsibility is assumed for loss or damage of any kind after goods have been delivered to the proper transportation company.

Terms Cash.

Prices given in this Catalogue **will be strictly adhered to.** The list is as low as is consistent with good work, and as many enquiries reach us and much time is lost (and unnecessary correspondence occasioned thereby) intending purchasers will please note that the **list prices** of Dry Cell Batteries are **net and not subject to rebate or discount.** Bearing in mind that we take back exhausted Cells at three-fourths their original catalogue price, in exchange for new; that you pay us, for example, $65.00 for a 50-Cell Battery; that when it is completely worn out, we allow you $45.00 for its elements in exchange for new; — how could it be possible for us to make a discount to any one without suffering constant and continued loss?

In the case of the 50-Cell Battery above given, the difference in our favor is but $20.00, out of which must come cost of battery case, of water rheostat, of electrodes, cords, tray, commutator, pay of workmen, interest, profit and loss, etc.; and since the same proportion holds good with all our other Batteries, patrons must see that we have no business relations with makers of antiquated acid apparatus in matter of discount. Acid Batteries, once worn out, are worth absolutely nothing; ours have a fixed and positive value at all times.

Money should always be enclosed with orders; however, when it is not, goods will be forwarded by express, C. O. D., provided remittance covering cost of transportation, both ways, has been received.

The best ways to remit money are by Bank Draft, Postal Money Order, Express or Registered Mail; but the first method is preferred.

The distinguishing feature of the now well-known Chloride of Silver Dry Cell Batteries, whereby they differ essentially from all others, obsolete as well as yet existent forms, is not only the particular way and manner the Silver Chloride itself is applied to electrical work, ensuring compactness, efficiency, constancy and durability; but also the fact that the cells themselves, ***dry and free from liquid,*** once they are finished, become ***immediately ready for long-continued use*** without further attention of any sort soever until their elements shall have been completely reduced and exhausted.

The Advantages we Claim for Them are:

1.—COMPACTNESS AND PORTABILITY.

A 50-Cell Galvanic Battery, that has an electro-motive force of more than fifty volts, with electrode cords, rheostat, tray and mahogany case, 6 x 7 x 10 inches, complete, weighs not more than 11 pounds; and the weight of a 50-Cell Combination Battery having a powerful Faradic Coil in same box, is but a trifle more. The inestimable benefit to physician and patient alike of so complete and powerful an electrical outfit, that can be freely and easily carried wherever necessary, needs no argument.

2.—CLEANLINESS.

This point necessarily follows from the absence of all liquid and the hermetical sealing of the cells—caustic and corrosive liquids being out of the way, there is no reason but what the batteries must remain clean at all times.

3.—CONVENIENCE AND RAPIDITY OF ACTION.

No battery can be as conveniently and quickly operated as these. With them, it is only necessary to open the box, connect the electrodes, when the current instantly develops upon final closure of circuit. Reverse the process: open the circuit, disconnect the electrodes, and current, together with waste of elements, at once ceases.

4.—CONSTANT AND UNIFORM CURRENT.

Steady work does not weaken the strength of current or cause it to fall in the slightest. After two or more years of regular use, due trial and strict examination shows that the Chloride of Silver Dry Cell Constant Current Batteries produce the same even, steady flow of electricity as when just finished. No other practical form of medical battery ever has done or can do that—a few minutes to an hour is quite sufficient to exhaust the power of any of them, from the Bichromate up.

5.—EXTREME DURABILITY.

This follows as a matter of course from what has been said above—the simplicity of the apparatus and absence of parts liable to wear, loss or breakage, as well as of fluid to evaporate, corrode or destroy metal and connections; preservation of the elements and prevention of all waste whilst the battery is not in use: superiority in respect of lasting quality is beyond question. No repairs are ever necessary, and the life of a Constant Current Chloride of Silver Dry Cell Battery is only limited by the actual amount of work it does. This work, after two or more years, finally reduces the elements, when the inner cases, with their exhausted cells, can, at a nominal cost, be exchanged for new cases, containing entirely new cells; and the battery at once becomes precisely as good and powerful as ever.

GENERAL DESCRIPTION.

Each instrument consists of a number of Chloride of Silver dry cells, hermetically sealed, arranged in series, and encased in a japanned metallic box to themselves, leaving nothing exposed but the connecting pins and nuts securing them to box-top, as shown in Cut No. A, which represents the inner, removable, cell case of a galvanic, constant current, battery.

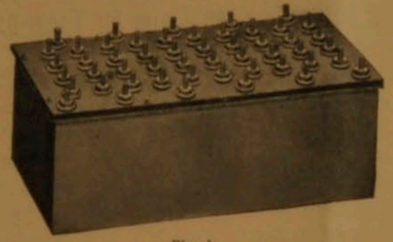


Fig. A.

When the elements are exhausted, this metal case and contents is the part which is renewed,—a matter of mere exchange of one set of elements for another; so simple that no time is lost and labor greatly economized thereby. The cost of renewal is but 30 cents for each galvanic cell.

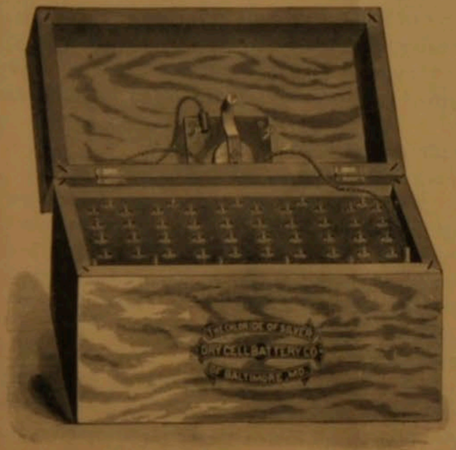

THE CHLORIDE OF SILVER
DRY CELL BATTERY CO.
OF BALTIMORE, MD.

Fig. B.

These inner cell cases are now placed in hard wood handsomely finished and polished outer battery boxes, from which they can be readily removed at any time by lifting studs; and are finally covered by loose, hard-rubber plates, through which the connecting pins themselves alone project. Each of these top plates is regularly numbered from 0 up to total number of cells in the battery.

Cut B above shows complete battery as described; box open, ready for work.

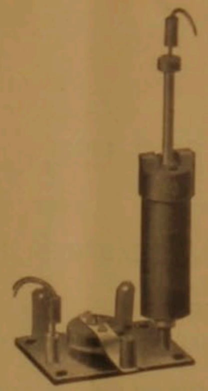


Fig. C.

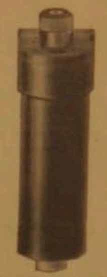


Fig. D.

Galvanic batteries of 24 or more cells have, in addition to the preceding parts, the following accessories:—

1.—A CURRENT REVERSER,

shown in Cut B, and also in Figure C. This is a hard rubber plate, secured within the box top; has two metal posts with conical sockets to take free ends of electrode conducting cords, a lever or switch for making and breaking—closing and opening—the circuit, as well as for changing the poles; and two short fixed cords for uniting it with the cells.

2.—A WATER-RHEOSTAT,

shown in Fig. D., and also in Figure C, in position on the current reverser. This is of hard rubber, has removable screw cap for putting in fluid, a socket below to take either of the metal posts of current-reverser, and a small socket in top of its piston to receive electrode conducting cord.

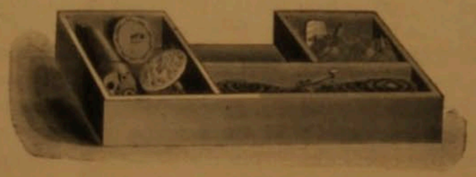


Fig. E.

3.—A STRONG AND DURABLE TRAY,

shown in Figure E. This fits within the box top, and as the cut explains itself, needs no particular reference here.

DIRECTIONS FOR USE.

☛ EVERY BATTERY IS READY CHARGED BEFORE SHIPMENT.

TO USE THE 6, 12, 16-CELL GALVANIC BATTERIES.

Before making connections first thoroughly wet the sponge electrodes, then attach them to the conducting cords, and finally fix the free ends of the cords by steady pressure into two of the numbered studs. As each stud represents a cell, any number of cells may be connected for use; only those cells between two studs connected as above being in circuit. For instance, one tip being in the 0 and the other in 6—6 cells are in circuit; or, one tip in 2 and the other in 12—10 cells are in circuit: and so on. Special care should be taken of these batteries in accordance with caution label.

Should the current meet with great resistance while applied to some parts of the body, it might appear as if none were passing; but to convince yourself that such is not the case, remove the sponge electrodes from the conducting cords and apply both metallic tips to the tongue—you will at once feel that your battery has a decided current.

TO USE THE 24, 32 AND 50-CELL GALVANIC BATTERIES.

1. Attach desired electrodes to the long conducting cords—if sponges are to be applied, wet them well beforehand—and secure the cords themselves to the current-reverser by pressing their tips into the sockets of the two metallic posts. Now, first seeing that the switch-lever is in the centre, unite the required number of cells to the current reverser by means of the short fixed cords by pressing the tips of the cords firmly upon the cell pins. Each pin represents a cell; and as before, one cord being on the 0, 2, 4, or any other number, and the remaining cord at the 40 or 50, all the cells between the connections are in circuit, and all the others out of circuit. When ready for the electricity, move switch lever to the right or left, as far as it will go. Current can be reversed without removing electrodes from the patient by bringing lever to opposite side of current reverser.

3. When Rheostat is to be used, first put in three-fourths as much water as it will hold, attach one of the electrode cords to it, pull piston out as far as it will come, and set the instrument firmly upon either socket post of switch-board,

DIRECTIONS FOR USE.—Continued.

As shown in illustration F; making all other connections same as before. Make current stronger or weaker by pushing the piston in or pulling it out. Batteries work longer and wear better if all the cells are put in circuit at each operation, and current strength adjusted by means of the rheostat, instead of by the more common method of increasing or decreasing the number of cells themselves: besides, the former is much more exact and scientific.

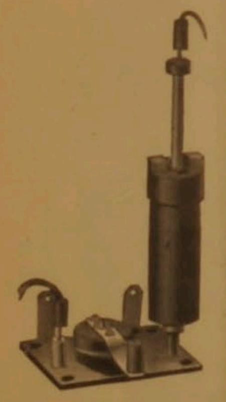


Fig. F.

The cut shows rheostat in proper position on current-reverser—piston drawn out; weakest current—to get the strongest current push piston all the way in.

4. When through with work, at once separate all the connections, bring current-reverser lever to the centre immediately; clean and dry sponges and other parts needing it, and put them in their proper places: not forgetting to pour water out of rheostat.

5. ***Be careful to follow caution label*** and be particular—a. Not to lay moist or metallic articles on the cell pins. b. Not to let sponges, or electrodes of any kind touch each other while the battery is at work; and, of course, not to put both sponges or electrodes in same vessel of water when they are connected to the battery.

CHLORIDE OF SILVER FLUID BATTERIES

do not stand transportation, are heavy and are not simple in construction, and therefore we manufacture

Chloride of Silver Dry Cell Batteries only.

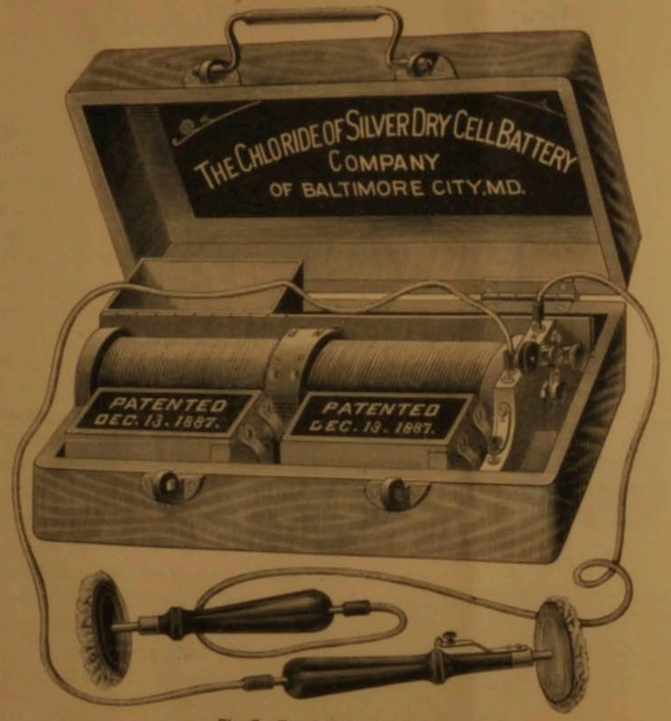

THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY
OF BALTIMORE CITY, MD.
PATENTED DEC. 13, 1887.
PATENTED DEC. 13, 1887.

Fig. G.—Two-Cell Faradic Battery.

THE USE OF THE DOUBLE COIL FARADIC BATTERY.

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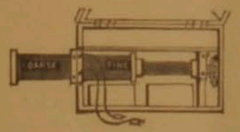
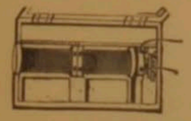
1. ***Both cells*** must be in proper place in the box at all times. "This side up," "in" or "out of circuit," will serve as a guide, according as one or both are to be used at a time. Pressing the cell case to right will loosen lower contact so that it can be lifted out. Adjusting upper contact to the spring, and using same pressure to right will permit the setting of lower contacts, and finally the cell case itself in place.

2. ***Before starting*** battery or using current ***always slide*** outer bobbin, containing secondary coils outwards, so as to expose the inner primary bobbin entirely—coarse or fine secondary can be put in circuit by removing outer bobbin from the core, and bringing desired coil next to or over the primary. Note this: ***Current is made stronger by pushing the outer bobbin towards*** the interrupter. The more the primary coil or core is exposed, the weaker the current, and *vice versa*. Cut shows connections made and battery ready for fine secondary current. The coarse is obtained precisely in same way, but with bobbin reversed—"coarse wire" to the right.

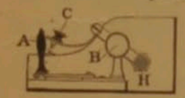


3. ***To get the primary induced current,*** put the wire horseshoe in the pair of sockets to right of centre of outer bobbin; but remember in this case, ***current is weakest*** when core or inner wire is completely covered, and strongest when this is completely exposed, exactly the converse of previous rule in 2, above. Cut shows position of parts as described, with inner wire concealed—weakest current would be produced in this position.



4. ***Cords:***—when the ***secondary current*** is to be used, secure the conducting cords in the ***holes to right of centre*** of outer bobbin. When the ***primary current*** is desired, with wire horseshoe in position shown in cut—put the tips in the ***holes immediately next the interrupter.***

5. ***To start the current:*** Move the lever "A" to the right until it rests upon the button beneath it. Should the vibrator "H" not work freely, adjust it by turning the set screw "B." The slow interrupter is shown at "C."



As a majority of the cases treated require but a moderate current, only ***one*** of these Faradic cells should be ***in circuit at a time***—turn and turn about. This will prolong their working life to 200 or more hours: about 100 hours being the limit when both cells are continuously in circuit. In case of wanting a stronger current than one cell will give, place both cells in circuit together. Taking into consideration that the renewal of these cells costs but $1.50, it is readily seen that the batteries far ***excel all others, not only in general convenience, but also in economy.***

Finally: read and reread each of the preceding directions carefully, observe them strictly, and your battery will ***always be ready for work,*** will never fail you, and will never fail to be just what we represent it—the most perfect, the only perfect, and the ***cheapest Battery ever made.*** As already stated, the constant current batteries, whose capacity is from 700 to 720 hours, just as they come from the shop, will do all the electrical work of the busiest and most active medical practitioner for two or three years continuously, without attention of any kind; ***and in any climate***—the total cost of which work does not exceed 2½ cents for each hour of actual use.

Bearing in mind what ***Chloride of Silver Dry Cell Batteries are:*** Their simplicity, cleanliness, lightness, and that they ***have no liquid,*** this is a matter of the greatest comfort itself, not to mention the saving of time which has always to be devoted to rectifying and overcoming the drawbacks of the old-style cumbersome acid and fluid chloride of silver appliances, repairing corroded metal parts, amalgamating roughened plates or restoring evaporated fluids. With our Batteries all this is avoided.

PRICE LIST.

[NOTE.—In ordering any of the batteries listed below it might be noted that the Nos. 1 and 2 are intended for general medical use, and are capable of treating every case, no matter what its nature—from those requiring the mildest to the strongest galvanic current; the No. 2, of course, having the additional advantage of the induction coil. The No. 3 batteries, however, containing a small number of cells, are adapted to treatment of cases needing a mild current and to the electrolysis of small growths. They have full power for the work for which they are intended, but of course will not embrace so wide a field as the others. The Two-Cell Faradic No. 5 needs only a passing notice, as its power is equal to any case, and will create the most delicate as well as a most intense current.]

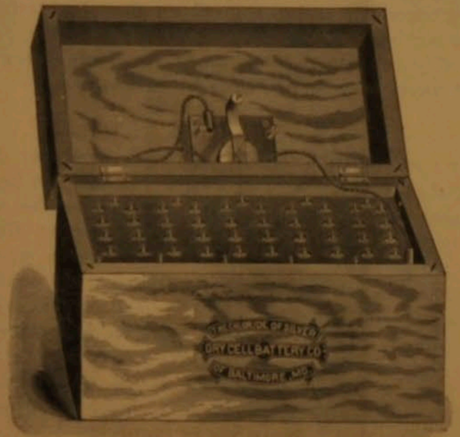
Each and every metal part of the following apparatus and electrodes is most carefully polished and nickel-plated, and each will be found even in the smallest detail, made and finished in the very best manner, and second to none in respect to every quality that goes to make up a first-class instrument.

No. 1.—GALVANIC BATTERY.

This is a constant-current Battery, designed especially for physician's use. It is put up in a very handsome, light, hardwood box, 6 x 7 x 10 inches. Metal parts are all finely finished and nickel-plated, and each is provided with a hard-rubber switch-board for making and breaking the current and changing the poles; a water rheostat, one plain and one interrupting handle, conducting cords and best quality sponge electrodes.

24-Cell	Price,	$38.00
32 "	"	45.00
50 "	"	65.00
60 "	"	75.00
84 "	"	95.00

BATTERIES OF SAME STYLE, WITH FEWER OR MORE CELLS, MADE TO ORDER AT SHORT NOTICE.


THE CHLORIDE OF SILVER
DRY CELL BATTERY CO.
OF BALTIMORE, MD.

50-Cell (No. 1) Galvanic Battery.—Case open, ready for work.

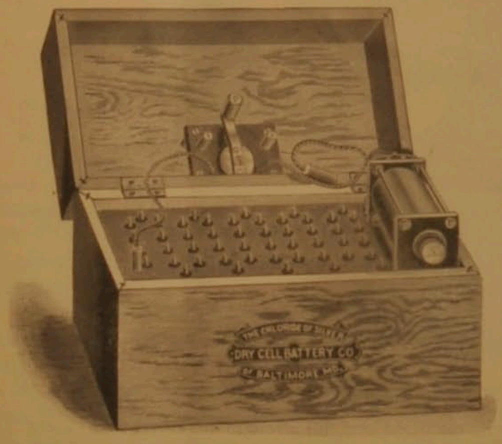
The capacity of these Batteries is 720 hours of actual work. The cost of operating the 50-Cell is 2½ cents per hour. The others proportionately more or less, according to number of cells.

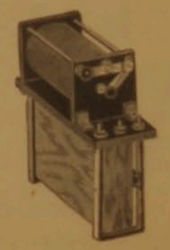
Charge for Renewing and Restoring, per cell, 30 cents.

No. 2.—COMBINATION BATTERY.

This Combination Battery, so far as the galvanic part is concerned, is precisely the same in every particular as the No. 1 preceding, but it contains in same box a Compact Faradic Coil and Cell, capable of producing the most delicate as well as the most intense and powerful induction current.

As this Battery has all the merits already mentioned — convenience, portability, completeness, etc. — it is unquestionably the most perfect and practical electrical apparatus ever offered to the profession.


THE CHLORIDE OF SILVER
DRY CELL BATTERY CO.
OF BALTIMORE, MD.



Faradic Coil and Cell to No. 2 Batteries.

24-Cell	Price,	$58.00
32 "	"	65.00
50 "	"	85.00

OTHER SIZES TO ORDER AT SHORT NOTICE.

The galvanic part of these Combination Batteries will work 720 hours continuously. The Faradic Cells have a capacity of 100 hours.

Charges for Renewing and Restoring:

For each Galvanic Cell	.30
" " Faradic Cell-Block to Combination Battery	$1.50

REMEMBER THAT WE ARE THE ONLY MANUFACTURERS OF

CHLORIDE OF SILVER DRY CELL BATTERIES.

SECOND-HAND

Acid and Fluid Chloride of Silver Batteries.

We have been frequently asked by customers to exchange their old acid and **FLUID** Chloride of Silver batteries for our DRY CELLS, on account of the great superiority of the latter, their constancy, cleanliness, lightness, portability, and reliability under all circumstances.

This we cannot do in any case, since the demand for acid and fluid batteries of all kinds is so small that such cells are absolutely valueless to us.

MIL-AM-METER.—Continued.

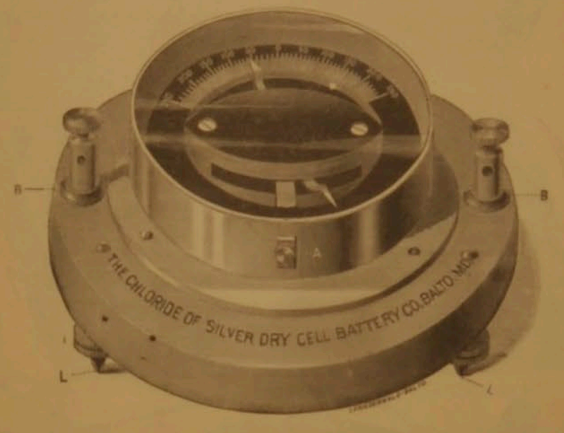
Sixth—The perfect meter should have a wide range of measurement. This has been obtained in all other meters by a complicated and troublesome method of shunts, either by switches or plugs, involving the use of various multipliers in connection with a fixed scale. In our new meter, by an entirely new and wonderfully simple arrangement, we have provided for the widest possible compass, together with direct reading scales. Three independent reading scales are stamped at equal distances apart on the three faces of a celluloid roller. One of these scales is marked in 5 milamperes, divided into halves. The second scale is divided into 25 milamperes, and the third scale reads up to 250 milamperes. This roller is placed in the face of the meter, under the end of the pointer, on a shaft which passes through the side of the case, and terminates in a button by which the roller may be turned.

In connection with this roller is our novel device inside the case, by which, when the roller is turned so as to bring any one of the three scales to view under the pointer, the connections within the case are automatically adjusted so as to cause the meter to read directly and accurately, according to the scale so exposed to view. By this means the physician is saved the trouble of using multipliers with his scale readings, and has at command three separate scales meeting every desirable case, and each scale reading his measurements directly.

The satisfaction which physicians have in this novel and radical improvement in meters, together with the superiority of our meter in every other desirable characteristic, makes this instrument worthy of exclusive use amongst the profession of this country.

PRICE, $30.00.

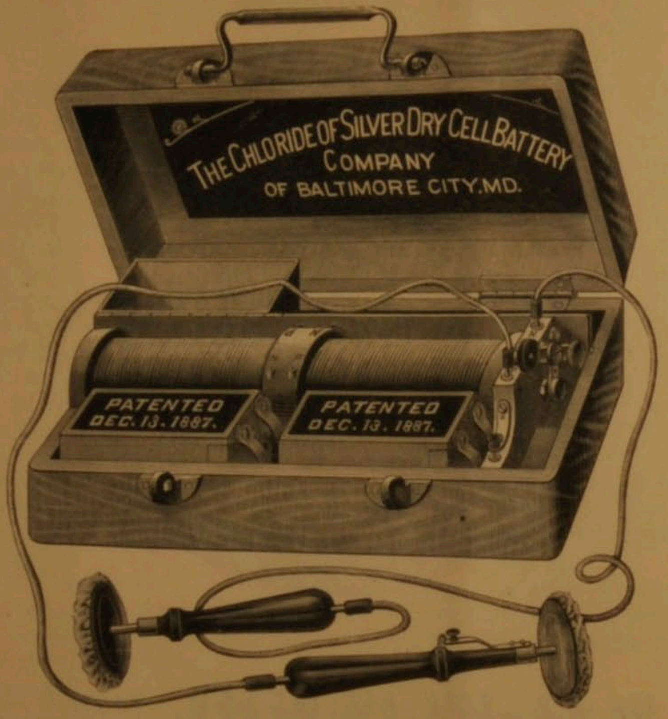
Why is the largest factory for the manufacture of medical electrical apparatus in Baltimore? Because no other company manufactures CHLORIDE OF SILVER DRY BATTERIES, and these are the best.



No. 4-A.—MIL-AM-METER. Price $20.

Cut No. 4-A shows a form of Meter which will be found very useful for the general work of electricity. It differs from the instrument shown in figure 4, and has been designed to meet the wants of those who desire a most beautiful instrument at a reasonable price. Its scale is divided into degrees reading from 0 to 250 milamperes. The instrument is direct reading, each division representing five milamperes. This meter contains no permanent magnet, is extremely simple in its construction, and therefore is not liable to get out of order.

To use the instrument, place it on some level surface and release the index needle by turning the small screw marked A until the needle swings freely. The instrument can be leveled by means of the screws L. After the meter is leveled and the indicator released, it is placed in circuit by inserting the ends of conducting cords into binding posts marked B.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY
OF BALTIMORE CITY, MD.
PATENTED DEC. 13. 1887.
PATENTED DEC. 13. 1887.

No. 5.—DOUBLE COIL FARADIC.

An elegantly-finished compact instrument. Metal parts of the best material possible; carefully adjusted and handsomely nickel-plated. It has two hermetically-sealed cells, either one or both of which can be used as required; a Du Bois-Raymond System Induction Coil, with interchangeable fine and course wire winding for secondary current on the outer bobbin; wire horse-shoe, for bringing primary current into circuit; plain and interrupting handles with best quality sponge electrodes and conducting cords, etc.

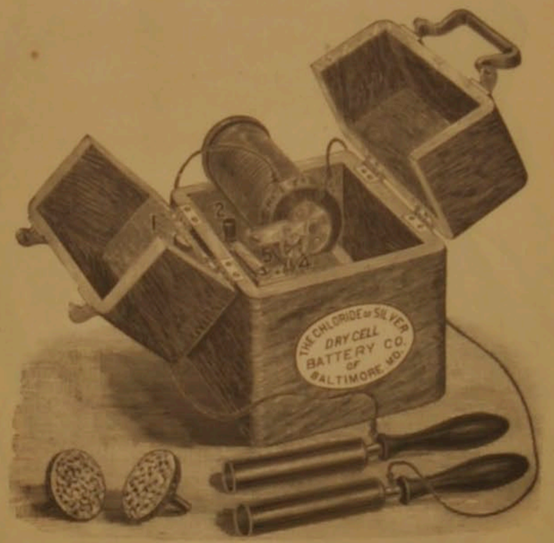
Put up in handsome hardwood box, with patent self-locking handle, which securely fastens the box and lid as soon as it is shut and attempt made to lift it.

The cells of these Batteries will work 100 hours continuously and cost 1½ cents per hour to operate.

PRICE OF BATTERY, COMPLETE, $20.00.

Charge for Renewing and Restoring the 2-Cell Blocks, $1.50.

FOR FULL DESCRIPTION OF ABOVE INSTRUMENT SEE PAGES 10 AND 11.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO. OF BALTIMORE MD.

No. 6.—SPLIT TOP FARADIC BATTERY.

This instrument, designed especially for physician's visiting use, has several entirely novel features. It is put up in a handsomely finished hardwood box, six inches high and about five inches square, with our patent automatic lock handle. The box-top is split lengthwise; can be opened (as shown in the cut) when handle is turned aside, but is always securely fastened and locked when lids are closed and handle raised in position to carry.

This Battery has a most powerful induction coil and a four-cell block, giving a very steady and uniform current of three kinds: primary, secondary and combined: the force of which can be easily modified and made delicate enough for the most nervous or sufficiently strong for the most robust patient.

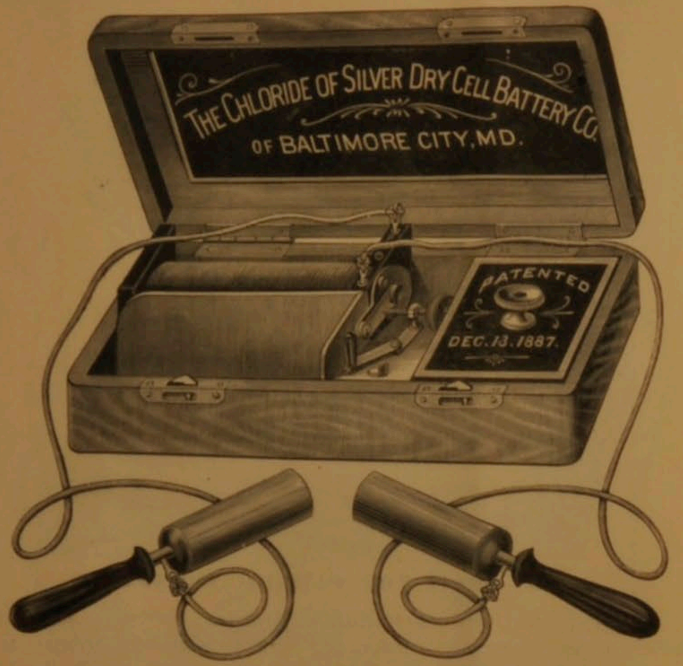
Each instrument is supplied with one pair conducting cords, one pair ebonite handles, one pair round-flat sponge electrodes and one pair metal handles.

To use it (having connected the desired electrodes—always wetting sponges beforehand) bring the lever upon the metal contact, and the Battery will at once begin to work. When through with work shut off the current and disconnect the parts. Always be careful to remove dirt and moisture after each operation. Shutting that part of the box-top which covers the coil throws the lever off the contact stud and stops the current automatically, thus providing against forgetfulness on part of operator and unnecessary wear of the elements.

The cells of this Battery will work 100 hours continuously and cost 1½ cents per hour to operate.

PRICE OF BATTERY, COMPLETE, $15.00.

Charge for Renewing and Restoring Cell-Block, $1.50.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
OF BALTIMORE CITY, MD.
PATENTED
DEC. 13, 1887.

No. 7.—POCKET FARADIC BATTERY.

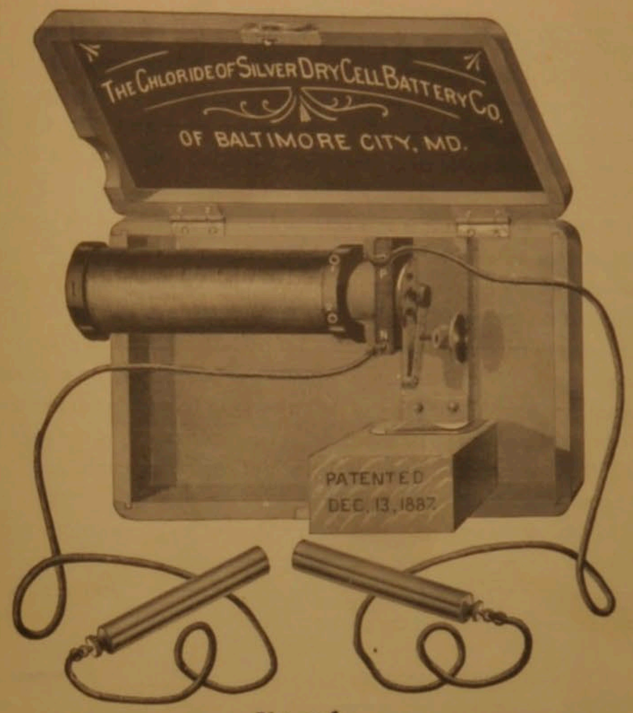
This instrument is designed for the use of families as well as physicians, and is extremely handy, compact, durable and simple in its mechanism. It is put up in a handsome hardwood box—8½ inches long by 4½ inches wide and 2 inches deep—and furnished with a pair of conducting cords, one pair ebonite handles and one pair hollow metal electrodes. The induction coil, giving three currents,—primary, secondary and combined,—is of superior make and finish, and has no equal anywhere in the uniformity and smoothness of its current.

The cells of this Battery will work 100 hours continuously and cost 1½ cents per hour to operate. Each cell is secured in position on floor of its box by a verticle pin passing through it and held there by the large set screw shown in cut.

PRICE OF BATTERY, COMPLETE, $10.00.

Charge for Renewing and Restoring Cell-Block, $1.50.

In this Battery we have met the want which every physician recognizes—an instrument of the type commonly known as the Pocket Battery—of beautiful finish and low price, with every quality satisfactory to the user, and with all the trouble and nastiness of the wet cell entirely banished. This Battery is a genuine triumph in this direction, combining perfection in every detail, together with a permanently closed Dry Cell, which in the use of the Battery does not have to be touched or treated in any way. To set the Battery in operation, open the cover and turn the switch; closing the cover breaks the circuit. We are sure these points will appeal to the experience of every one who has used, or desires to use a Pocket Battery.


THE CHLORIDE OF SILVER DRY CELL BATTERY CO.
OF BALTIMORE CITY, MD.
PATENTED
DEC. 13, 1887.

No. 7-A.

A NEW FAMILY BATTERY.

"THE LORD BALTIMORE."

Very frequently Physicians prescribe Faradic Batteries for their patients, and the intelligent doctor being fully aware that those which we manufactured were the cheapest, provided quality was taken into consideration, did not hesitate to recommend the purchase of a **CHLORIDE OF SILVER DRY CELL FARADIC BATTERY;** when, however, such an order reached our agents, it was found that a $10 battery was the cheapest that could be obtained, and many customers not having this amount to spend, were compelled to buy an antiquated **troublesome acid or fluid battery.** Thinking that a *poor man* has as much right to possess a good battery as a *rich man*, we have constructed an instrument at a price within the reach of all, as shown in cut No. 7-A. It meets all the requirements of a cheap, but *first-class*, machine. The case is of hard wood, highly polished, and measures only 4x5x2 inches. It is not only the best made and cheapest faradic battery on the market, but it is also the most economical to maintain. No destructive acid! No corrosive materials! It is a *comfort at home*, and *invaluable while travelling*. It is so simple that a child can use it.

To start the current it is only necessary to place the cell block between the metal springs in such a way as to bring them and the metal strips on the sides of the block in good contact. See that the buzzer spring is properly adjusted, and the battery will work without further trouble or interference.

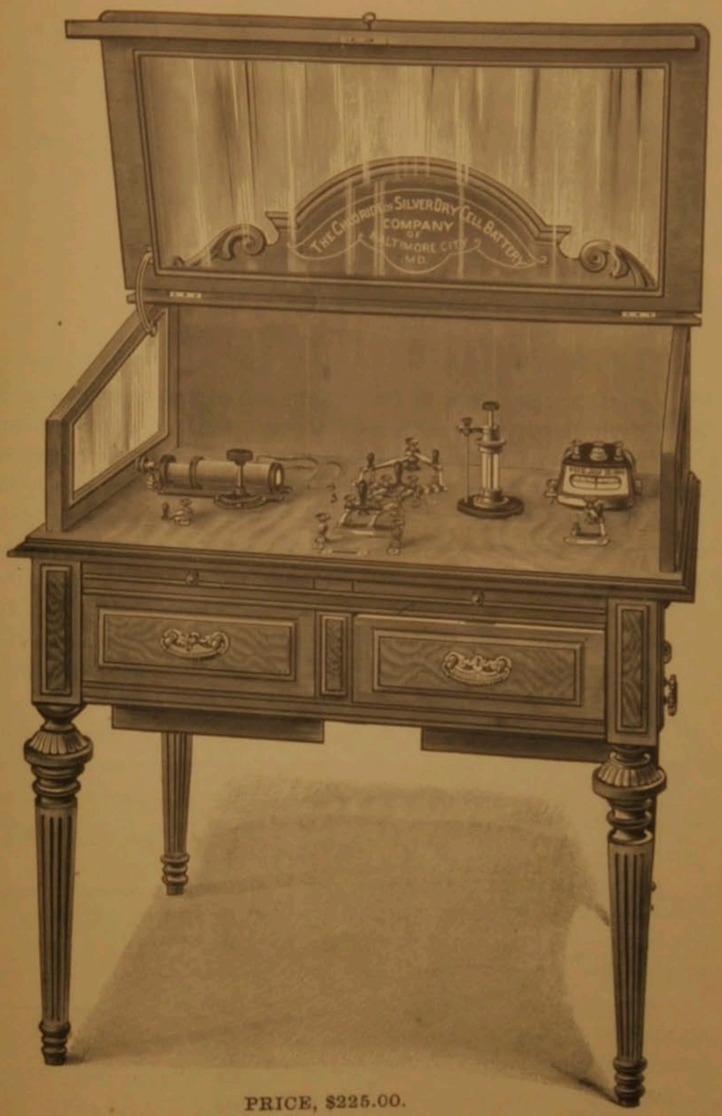
Owing to the care with which this battery is made, the *currents are perfectly smooth*. It will furnish a **primary,** a **secondary,** or a **combined current,** as desired. All three of the currents can be modified to suit the most *delicate child*, and can be increased to suit the requirements of the most *robust man*. The apparatus is provided with a pair of conducting cords, and a pair of handsome nickelplated electrodes.

In this battery we have solved the problem of making a strictly first-class instrument at a *very moderate cost*, and we are convinced that, taking into consideration its *many excellent qualities*, its completeness and its fine finish, that it is the cheapest battery on the market to-day.

Price of Battery, complete - - -	$6.50 ~~[illegible]~~
Price of renewing and restoring cell block when it becomes exhausted, - - - - - - - -	.75

LIFE OF BATTERY CELLS 40 HOURS.

If cell block is ordered to be returned by mail, add 6c. to cover postage.


THE CHLORIDE OF SILVER DRY CELL BATTERY COMPANY OF BALTIMORE CITY MD.

PRICE, $225.00.

ELECTRICAL CABINET,

PROVIDED WITH CHLORIDE OF SILVER DRY CELLS,

—Manufactured only by—

The Chloride of Silver Dry Cell Battery Co., of Baltimore City, Md.

DESCRIPTION OF

ELECTRICAL ❋ CABINET,

ILLUSTRATED ON PAGE 20.

IT is of great importance to the medical practitioner in the application of electricity to the various diseases which are amenable to such treatment, to have his electrical apparatus completely under control. It must be possible for him to determine at a glance the strength of current he may be using ; he must also be able to regulate the current without removing the electrodes from the subject ; he must have convenient means of reversing the direction of the current ; and it is also desirable that, by a single adjustment, the current may be changed from a **Galvanic** to a **Faradic,** and *vice-versa.* All this means that the apparatus shall be arranged in a very compact way. The various regulating devices, measuring instruments, switches, contact keys, etc., must be placed within a limited area, so that they will all be easily within reach and yet not interfere in any way with one another's action. Another feature of great importance to be regarded is, that the supply of electricity shall be invariable—that it shall be always the same ; and if, added to this, there can also be secured portability, the electrical outfit cannot fail to prove perfectly satisfactory.

The problem of producing a battery which will furnish a **constant electromotive force,** and at the same time be **small in size** so that it may be readily carried about, is one whose solution presents difficulties of a very serious nature. Several forms of practically constant batteries are well known, but they are, as a rule, quite large, and worst of all, they require much attention in order to be kept in this condition. On the other hand, many portable batteries have been constructed, but, with few exceptions, such batteries do not yield a constant current except for very short periods of time ; *i. e.*, they "run down" with extreme rapidity. The problem is, as stated before, a difficult one, but it is believed that it has been solved in a perfectly successful way, and that the

CHLORIDE OF SILVER BATTERY

will fulfill all the requirements.

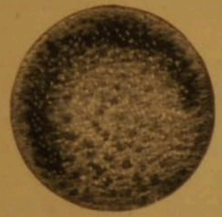
The **ELECTRICAL CABINET** shown in the accompanying sketch has been devised for use in the Dispensary Wards of the **Johns Hopkins Hospital**, BALTIMORE. As will be seen at a glance, the table is extremely complete, and much attention has been paid to details.

The Cabinet is provided with a hundred **Chloride of Silver Cells,** which are capable of easily yielding a current large enough for any case in medical practice. These cells are connected up to a series of blocks in a switch, in ten sets of ten cells each. By moving the switch, therefore, it is possible to throw in circuit 10, 20, 30, 40, 50, 60, 70, 80, 90, or 100 cells, as well as to select any set or sets of 10 cells which may be desired. This is sometimes a great advantage, inasmuch as needlessly large resistances in the circuit for regulating the current are by its means rendered unnecessary. From this switch, which may be called the cell **Selecting Switch**, the current is led to a **Reversing Key,** thence to a **Water Rheostat,** thence through the **Mil-am-meter,** and finally to the main binding post to which the circuit cords or electrodes may be attached. Above the **Reversing Key** is another similar key which is used for the purpose of sending into the external circuit, *i. e.*, through the patient, either a continuous (**Galvanic**) or an alternating (**Faradic**) current. This is done by simply shifting the key from one side to the other. The Faradic current is furnished by a **Standard Induction Coil** placed in the left of the Cabinet ; this coil being supplied with an independent battery of about six cells, and furnished with a key by means of which the current may be interrupted periodically or as frequently as desired.

Towards the back of the Cabinet, but within full view of the operator, is situated a **MIL-AM-METER,** also provided with a switch for the purpose of throwing the meter in circuit or out of circuit, as desired. This meter is furnished with three scales, reading respectively from 0—5, from 0—25, and from 0—250 milamperes: and by turning a screw at the side of the meter case all of these scales may be brought into view successively. According to the work in hand that particular scale is employed on which the galvanometer gives a convenient deflection. The action of the meter is automatic, so that simultaneously with a change in the scale, there occurs the introduction of a *shunt* in the meter circuit, though the external circuit remains always the same.

The Cabinet is believed to be complete in every detail ; it is provided with all the necessary apparatus, and its workmanship has been given the most careful attention. Moreover, the **CHLORIDE OF SILVER DRY CELL BATTERY CO'S DRY CELL CHLORIDE OF SILVER BATTERIES** have received the unanimous approval of the medical profession, and are now confidently believed to be the most constant, the most durable, and the most easily managed cells on the market.

This Cabinet is simplicity itself. To use it requires no electrical or mechanical knowledge whatever. It can be employed by the most unskillful just as successfully as by the most advanced electrician.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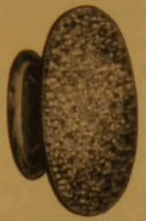
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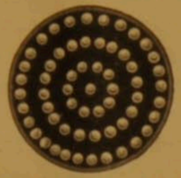
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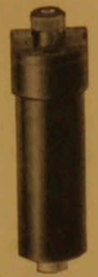
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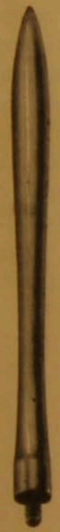
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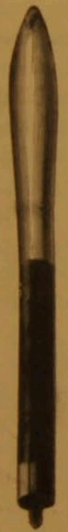
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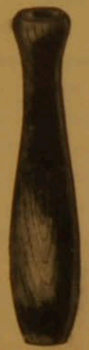
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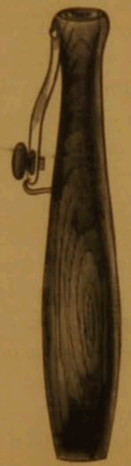
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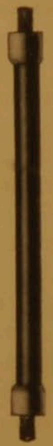
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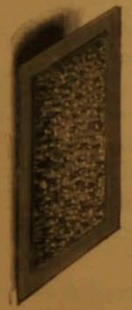
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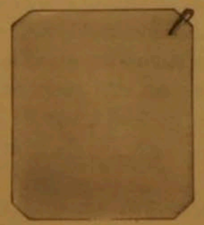
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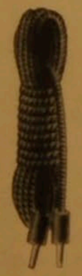
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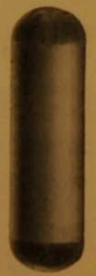
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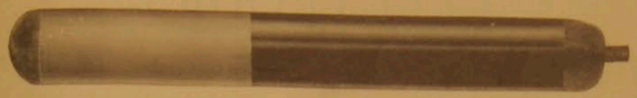
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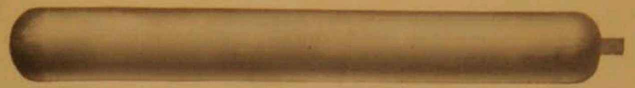
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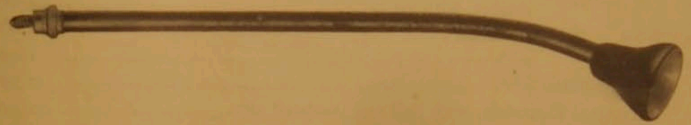
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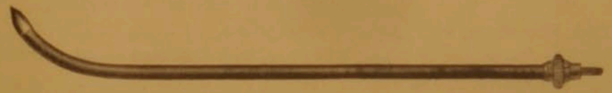
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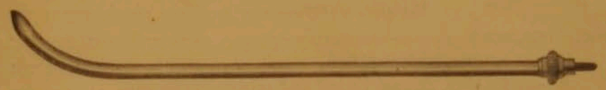
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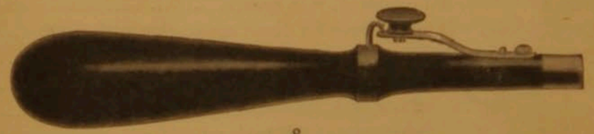
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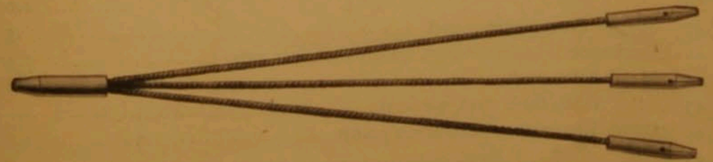
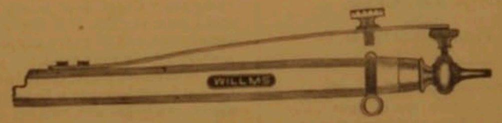

13–70

ELECTRODES.

8*	Handle, Hard Rubber, Universal, with Current-Breaker,	$3.00
9*	“ Ebonized, plain,	.50
10*	“ “ with Current-Breaker,	.75
11*	Water Rheostat, hard rubber,	1.50
12*	Conducting Cords, with metal tips, 5 feet long, per pair,	1.00
13*	“ “ short, for Electrolysis Needles, per needle,	.50
14	Eye Cup (Electrode), new style,	2.00
15	Small Eye Electrode, with stem,	.75
16	Ear and Nose Electrode, straight,	.75
17	Ear Electrode and Speculum, combined,	2.75
18	“ “ double, with sponge tips,	2.00
19	Nose “ insulated stem,	1.00
20	Tonsil “ with stem and ball,	1.00
21	Tongue Plate, with insulated stem,	1.00
22	Laryngeal Electrode, with ball and insulated stem,	1.00
23	“ “ “ sponge and insulated stem,	1.50
24	“ “ “ round sponge for external application,	1.50
25*	Disk Rheophore, with insulated metal points,	1.00
26	Rolling Rheophore or Wheel Electrode, with insulated metal points and Universal Interrupting Handle,	5.00
27	Rolling Rheophore, alone,	2.00
28	“ “ Handle, alone,	3.00
29*	Foot-Plate, zinc,	.75
30*	“ copper, nickel-plated,	1.00
31	“ folding, flannel lining and rubber insulation,	4.00
32	Neckband Electrode, self-retaining, with sponge,	2.00
33	Arm Electrode, self-retaining, with sponge,	2.00
34	Oval Sponge, soft rubber back for direct application with hand,	......
35	Round Sponge, with long handle for use under clothing,	1.50
36*	Sponge Electrode, with door-knob handle, per pair,	1.00
37*	“ “ rubber back, without handles, per pair,	1.00
38*	“ “ rectangular, 3 x 5, rubber back, per pair,	3.00
39	“ “ “ 2 x 4, “ “ “	2.00
40	Sponge Cup, nickel-plated,	.50
41	Duchennes Metallic Points, gold-plated, per pair,	2.50
42	Metal Balls, each,	.75
43	“ Disk, three sizes, all small,	......
44	Comb Electrode, small, seven points,	1.00
45	“ “ long,	1.50
46	Hair Brush Electrode,	2.50
47	Metallic Scourge, nickel-plated,	.75
48	Tooth Electrode, insulated stem,	1.00

All Electrodes illustrated by wood-cut are marked *

49*	Vaginal Electrode, partly insulated,	2.50
50*	“ “ all metal,	1.50
51*	“ “ cylindrical tip and insulated stem,	2.00
52	“ “ insulated in middle,	4.00
53*	Uterine Cup, with insulated stem, three sizes,	2.00
54	“ “ “ intrauterine stem,	2.50
55	“ Spiral Flexible Electrode, with insulated stem	2.00
56	Extra Olive Tips, round or pointed,	.20
57	“ Electrode, double current,	3.00
58	“ “ “ “ with cup and intrauterine stem,	3.50
59*	Rectal Electrode, partly insulated,	2.00
60*	“ “ all metal,	1.00
61	“ “ insulated in middle,	4.00
62	“ “ Bolton's insulated,	2.50
63	“ “ with Ball and long insulated stem,	1.25
64*	Urethral Electrode, insulated,	1.50
65*	“ “ all metal,	1.00
66	“ “ elastic, double current,	3.00
67	Catheter Electrode, silver, half curved,	2.50
68	“ “ “ full curved,	2.50
69	Needles for Electrolysis, straight, half-curved, full-curved,	......
	“ “ “ Gold-plated, insulated,	1.00
	“ “ “ “ set of six, in case,	7.00
	“ “ “ Platinum,	2.00
70*	Needle Holders, with cord and tips, to take 1, 2, 3 or more needles, per needle,	.50
71	Electrolytic Needle Holder, Chisolm's, with spring contact for closing circuit. When this holder is used the operator himself starts and stops the current by gentle pressure of fore-finger, making it the most convenient and elegant holder of the kind in use. Price, with needles,	4.50



All Electrodes illustrated by wood-cut are marked *

Please do not take up our time by asking what we can allow you in exchange for your acid or fluid battery. Such cells cannot be sold any longer to the medical practitioner, and they are therefore of no value whatever to us.

TESTIMONIALS.

BALTIMORE, March 29, 1889.

Dear Sir:—I have had a 50-cell Chloride of Silver Constant Current Battery for the last two years. This Battery has been used daily in my practice, in every description of service, and has been carried about constantly with me in my carriage, and in spite of the amount of current drawn from it, and the comparatively rough usage it has received, it has never failed me, nor cost me a cent for repairs. I have discarded all my Acid Batteries, of which I had about every kind that has been made. I regard the Chloride of Silver Dry Cell Battery as the most perfect electrical apparatus yet made.

ALAN P. SMITH, M. D.

514 CATHEDRAL STREET, BALTIMORE.

I have for some time past used the Chloride of Silver Galvanic Batteries furnished by Chloride of Silver Dry Cell Battery Co., and find them very satisfactory. The Dry Chloride of Silver Battery for portability, strength and constancy is the best I have ever used.

F. T. MILES, M. D.

415 W. FAYETTE STREET, BALTIMORE, 1887.

Chloride of Silver Dry Cell Battery has given me more satisfaction than any other galvanic apparatus in the market. It possesses the desirable advantages of portability and constancy of action.

A. B. ARNOLD, M. D.

BALTIMORE, March 2, 1889.

CHARLES WILLMS & CO.

Dear Sirs:—I desire to testify to the merits of the Chloride of Silver Dry Cell Battery, of which you are the manufacturers.

It combines the Faradic and Galvanic Batteries, and is the best Battery I have ever seen, for the use of the general practitioner. It can be carried from place to place, without getting out of order, and is always ready for use.

Yours very truly,
H. P. C. WILSON, M. D.

BALTIMORE, March 25, 1889.

Gentlemen:—I have made use of your Chloride of Silver Dry Cell Battery during the past year. I have never had an instrument to give me the same amount of satisfaction as this has done; to me it appears perfect, always ready for service and when you connect a certain number of the cells you are absolutely certain of the power that is being transmitted to your patient. For Gynecological work it is unsurpassed by any Battery that I have ever made use of. I use it every day for Electrolytic work, and find it to be absolutely reliable. Wishing you continued success in your enterprise, I am

Very truly yours,
WM. A. B. SELLMAN, M. D.,
Professor of "Diseases of Women," Baltimore University S. Med.
No. 5 East Biddle Street.

BALTIMORE, April 19, 1889.

Dear Sir:—In reply to yours of late date, I would say, I have used two Chloride of Silver Dry Cell Batteries. The first was the private battery of a patient with whom I traveled around the world. The battery was always in perfect order and in almost daily use until, being mistaken for an infernal machine, it was captured by the Russians at Warsaw. My present battery has been with me across the Atlantic and back, and has had several bad falls; once from a car in motion. It has been applied frequently and with much success, and has been found always in good working order. The advantages it possesses over other galvanic batteries are its portability and constant readiness for use.

Very truly yours,
NATHAN R. GORTER, M. D.
1 W. Biddle Street.

117 ELLIOTT PLACE, BROOKLYN, N. Y.

Dear Sir:—I have used the Chloride of Silver Dry Cell Battery for more than a year with entire satisfaction. It is superior to any other battery I have seen for convenience, durability and cleanliness.

Respectfully,
ROBERT ORMISTON, M. D.

MESSRS. CHAS. WILLMS & CO.

Gentlemen:—I have used the Chloride of Silver Dry Cell Battery with great satisfaction. I find it the most handy, convenient and efficient of any battery I have ever used.

Yours truly,
T. A. ASHBY, M. D.

WINDOM, MINN., April 17, 1890.

MESS. NOYES BROS. & CUTLER,
St. Paul, Minn.

Gentlemen:—I have used many differently made Batteries in a practice extending over a period of 18 years, but this season I have been using the "Chloride of Silver Dry Cell Battery" and I must say that it is the nicest, neatest, most convenient and in every respect the most perfect Battery I have ever used.

In the first place, there is no "Fluid" to spill out; it is enclosed in a beautiful mahogany case, always ready for use, and for a Portable Battery it is a perfect "Daisy."

Respectfully,
C. A. GREENE, M. D.

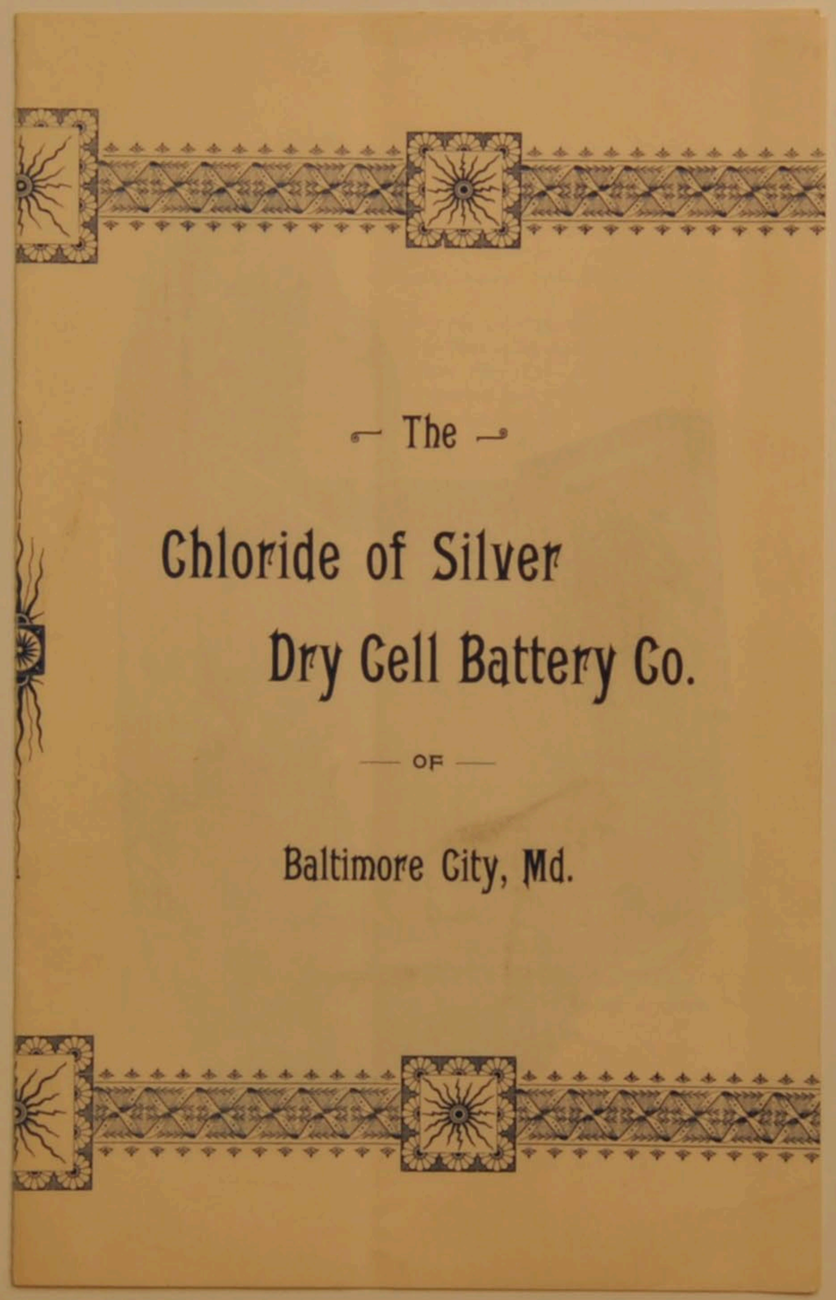
WASECA, MINN., April 21, 1890.

MESS. NOYES BROS. & CUTLER,
St. Paul, Minn.

Gentlemen:—I have used the two Cell Faradic and Fifty Cell Galvanic Chloride of Silver Batteries, made by the Chloride of Silver Dry Cell Battery Co., and purchased of you, with very great satisfaction. They are very portable, always clean and never fail to work. Their use is a pleasure to any one who has been annoyed as I have been with Zinc-Carbon and Acid Batteries.

Yours truly,
D. S. CUMMINGS, M. D.

A point has now been reached at which acid or fluid cells of every description have to make room for the Chloride of Silver Dry Cell Battery. The only establishment for the manufacture of these goods is in Baltimore, Md.

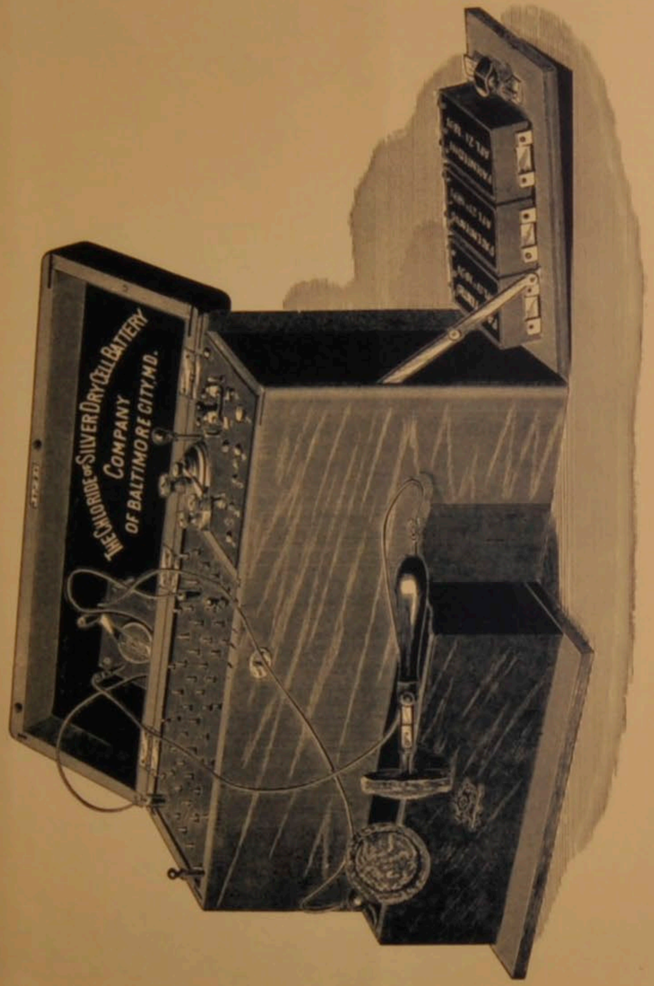


The

Chloride of Silver Dry Cell Battery Co.

OF

Baltimore City, Md.


THE CHLORIDE OF SILVER DRY CELL BATTERY
COMPANY
OF BALTIMORE CITY, MD.

Chloride of Silver Dry Cell Battery Company,
Baltimore, Md.

TO OUR PATRONS.

Your special attention is respectfully directed to the accompanying cut, which gives an illustration of the most *perfect and convenient combination battery*, without exception, that has ever been offered.

For some time past, orders for *Combination Batteries* have been on the increase, and as this indicated the great interest that the *Chloride of Silver Dry Cell Batteries* were exciting among the medical profession and feeling convinced that the demand for instruments having the two currents could be still further increased, we have spared neither time nor expense in making such *improvements* upon our previous pattern as we feel sure will command the admiration of all.

In presenting this instrument, we feel confident it is one that the trade can sell to the medical profession *at first glance*, so forcibly will it appeal to their intelligence as a *first-class investment*. It needs to be seen but once to be fully appreciated; hence no dealer can afford to be without a sample Battery, at least.

The faradic part of this Battery contains three cell blocks, and they are arranged in the box in such a manner as to admit of either one, two or three of them being used at a time. For special work, requiring a very heavy current, the whole three cells can be used, while for ordinary work — in which but a moderate degree of strength is desired — it will not be necessary to use more than one or two of the cell blocks. The advantage of this arrangement will be apparent to all, as it permits a careful man to economize the life of his cells; and if proper care is observed they will *last for a very long time*. The faradic part is also provided with a current reverser, current breaker; and it is possible to obtain *three currents* from same — viz: The primary (or so-called direct) current, the secondary (or induced) current, and a combination of the primary and secondary currents, while the arrangements for increasing and modifying the strength of currents are perfect.

Soliciting your valued orders, we are,

Yours, very respectfully,

The Chloride of Silver Dry Cell Battery Co.

BALTIMORE, MD.

Price List of Combination Batteries.

50-Cell Combination Battery, complete.
Dimensions, . . 14½ x 10¼ x 5¾.
Weight, ... 16¼ pounds.
Price, $85.00.

32-Cell Combination Battery, complete.
Same dimensions as above.
Weight, ... 14¾ pounds.
Price, $65.00.

24-Cell Combination Battery, complete.
Same dimensions as above.
Weight, ... 13¾ pounds.
Price, $58.00.

* * *

MANUFACTURED BY

THE CHLORIDE OF SILVER DRY CELL BATTERY CO.

BALTIMORE CITY, MD.